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# GENERAL INFORMATION

## HOW TO USE DISPLAY

### • SOLDERING:

1. Soldering Bath --  $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$  within 3 seconds. (Dip depth should under 1/16 inch below seating plane.)
2. Soldering Iron -- Under 40W within 3 seconds. (Tip temperature:  $205^{\circ}\text{C} \pm 5^{\circ}\text{C}$ )
3. The neutrality flux must be used before soldering.

### • CLEANING:

1. Do not use unspecified chemical liquid to clean display. They could harm the display. If cleaning is necessary, wipe the pin out with alcohol, Freon TE or Chlorosen at normal temperature for less than 1 minute, or wipe the surface with alcohol. When other chemical solutions not specified are used. It may cause crack or haze on the surface of the display.

### • PREVENTING OVER CURRENT:

1. Be not overcurrent.
2. In order to cooperate Vincenc displays under stable conditions. Put protective resistors in series. Resistor values can be determined by supplying voltage or current for the LED display. Recommended current is in the range of forward current 5mA to 20mA.
3. Circuit must be designed so that overvoltage (overcurrent) is not applied to the LED during on/off switching. Transient or pulse current will damage the junction of LED die.

### • BRIGHTNESS:

1. For obtaining even brightness. Each segment should be at the same current, so the best circuit design is to supply constant current for each segment.
2. To increase brightness. Increase current. But do not over maximum rating.
3. To check the appearance defect of LED display, the viewing distance should be 15 cm minimum.
4. For obtaining more uniform brightness on yellow and green display. The supplying forward current should be over 10mA, but do not be over rating.

## QUALITY CONTROL AND ASSURANCE

### RELIABILITY TESTS

CLASSIFICATION	TEST ITEM	DESCRIPTION AND TEST CONDITION	REFERENCE STANDARD
ENDURANCE TEST	OPERATION LIFE	To evaluate resistance of the device when it operated at electrical stress $T_a$ =under room temperature $I_f=12\text{mA} \sim 25\text{mA}$ per segment or $I_p=80\text{mA}/\text{duty}=1/8, P_w=1.25\text{mS}$ $I_p=160\text{mA}/\text{duty}=1/16, P_w=1.\text{mS}(\text{DOT})$ Test time=1000HRS(-24HRS,+72HRS)	MIL-STD-750:1026 MIL-STD-883:1005 JIS C 70021:B-1
	HIGH TEMPERATURE HIGH HUMIDITY STORAGE	To evaluate moisture resistance of the device when it stored for a long term at high temperature and high humidity $T_a=65 \pm 5^{\circ}\text{C}$ $\text{RH}=90 \sim 95\% \text{RH}$ Test time=240HRS $\pm$ 2HRS	MIL-STD-202:103D JIS C 7021:B-11
	HIGH TEMPERATURE STORAGE	To evaluate device's durability for long term storage in high temperature $T_a=85 \pm 5^{\circ}\text{C}$ (COB: $T_a=65 \pm 5^{\circ}\text{C}$ ) Test time=1000HRS(-24HRS,+72HRS)	MIL-STD-883:1008 JIS C 7021:B-10
	LOW TEMPERATURE STORAGE	To evaluate device's durability for long term storage in low temperature $T_a=-35 \pm 5^{\circ}\text{C}$ Test time=1000HRS(-24HRS,+72HRS)	JIS C 7021:B-12
ENVIRONMENTAL TEST	TEMPERATURE CYCLING	To evaluate resistance of devices under thermal stress, expansion and contraction $85^{\circ}\text{C} \sim 25^{\circ}\text{C} \sim -35^{\circ}\text{C} \sim 25^{\circ}\text{C}$ 30min 5min 30min 5min 10 cycles (COB: $T_{\text{hot}}=65^{\circ}\text{C}$ $T_{\text{cold}}=-25^{\circ}\text{C}$ )	MIL-STD-202:107D MIL-STD-750:1051 MIL-STD-883:1010 JIS C 7021:A-4
	THERMAL SHOCK	To evaluate device's structural and mechanical resistance when suddenly exposed at serious changes $85 \pm 5^{\circ}\text{C} \sim -35 \pm 5^{\circ}\text{C}$ 10min 10min 10 cycles (COB: $T_{\text{hot}}=65^{\circ}\text{C}$ $T_{\text{cold}}=-25^{\circ}\text{C}$ )	MIL-STD-202:107D MIL-STD-750:1051 MIL-STD-883:1011
	SOLDER RESISTANCE	To evaluate resistance of thermal stress caused by soldering $T_{\text{sol}}=260 \pm 5^{\circ}\text{C}$ Dwell time=10 $\pm$ 1sec	MIL-STD-202:210A MIL-STD-750:2031 JIS C 7021: A-1
	SOLDERABILITY	To evaluate solderability on leads of device $T_{\text{sol}}=230 \pm 5^{\circ}\text{C}$ Dwell time=5 $\pm$ 1sec	MIL-STD-202:208D MIL-STD-750:2026 MIL-STD-883:2003 JIS C 7021:A-2



# GENERAL INFORMATION

## ABSOLUTE MAXIMUM RATINGS

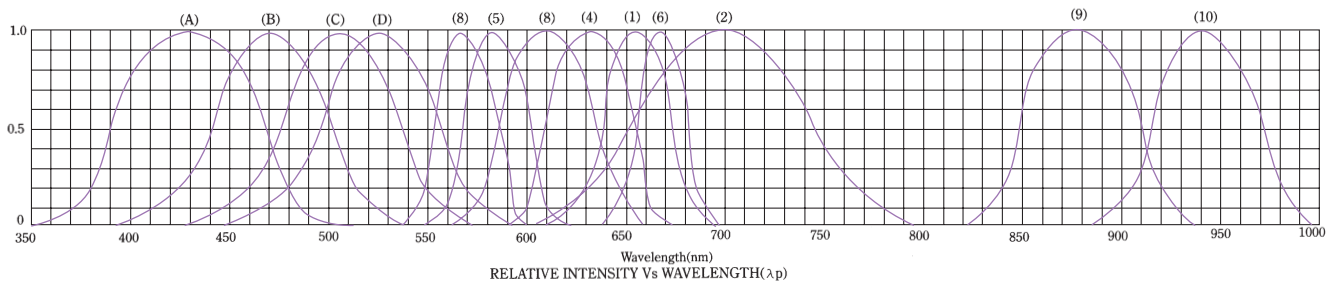
### 1. Test Condition For Each Parameter:

Parameter	Symbol	Unit	Test Condition
Reverse Voltage	$V_R$	V	
Reverse Current	$I_R$	$\mu A$	$V_R=5.0\text{Volt}$
Forward Voltage	$V_F$	V	$I_F=20\text{mA}$
Luminous Intensity	$I_v$	mcd	$I_F=20\text{mA}$
Viewing Angle	$2\theta$ 1/2	Degree	$I_F=20\text{mA}$
Spectral Line Half-Width	$\Delta \lambda$	nm	$I_F=20\text{mA}$
Power Dissipation	$P_D$	mW	$I_F=20\text{mA}$
Peak Forward Current(Duty 1/10 1KHZ)	$I_F(\text{Peak})$	mA	$I_F(\text{Peak})=150\text{mA}$

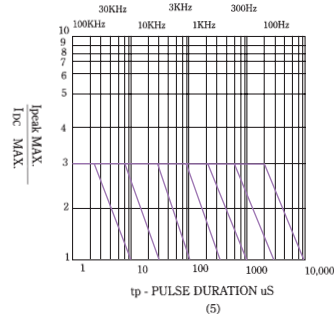
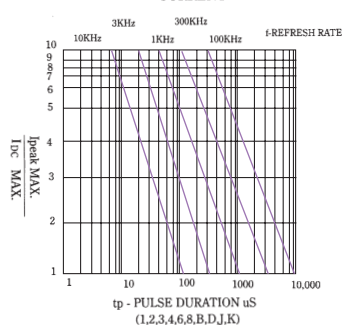
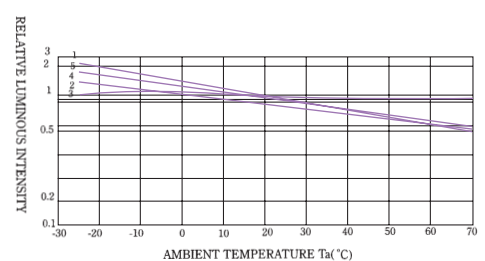
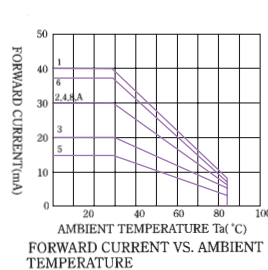
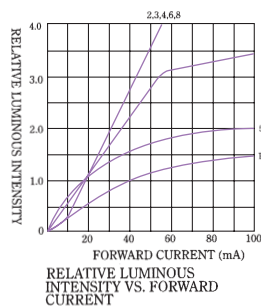
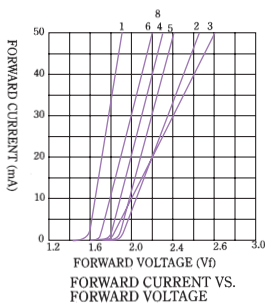
### 2. Absolute Maximum Rating: ( $T_a=25^\circ C$ )

Reverse Voltage	5.0 Volt
Reverse Current( $V_R=5V$ )	$\leq 100\mu A$
Operating Temperature Range	$-40^\circ C \sim +80^\circ C$
Storage Temperature Range	$-40^\circ C \sim +85^\circ C$

## TYPICAL ELECTRICAL-OPTICAL CHARACTERISTICS CURVES



- (1) wGaAsP/GaAs 655nm / Red  $\rightarrow$  2
- (2) wGaP 568nm /Yellow Green  $\rightarrow$  6
- (3) wGaAsP/GaP 585/Yellow  $\rightarrow$  5
- (4) wGaAsP/GaP 635nm/Orange & Hi-Eff Red  $\rightarrow$  3, 4
- (5) wGaP 700nm/Bright Red  $\rightarrow$  1
- (6) wGaAlAs/GaAs 660nm/Super Red  $\rightarrow$  0
- (8) wGaAsP/GaP 610nm/ Super Red (Amber)  $\rightarrow$  7
- (9) GaAlAs 880nm  $\rightarrow$  9
- (10) GaAs/GaAlAs/GaAs 940nm  $\rightarrow$  9, 9Wx
- (A) GaN/SiC 430nm/Blue  $\rightarrow$  8
- (B) InGaN/SiC 470nm /Blue  $\rightarrow$  8B1
- (C) InGaN/SiC 502nm/Ultra Green  $\rightarrow$  6Gx
- (D) InGaA/SiC 523nm/Ultra Green  $\rightarrow$  6Gx





# LED DISPLAY

(1) (2) (3) (4) (5) (6) (7) (8) (9)  
 VXX -         -

- ↓
- VINCENC HOME DEVELOPMENT CO., LTD. (1) SD : Segment Display  
 BA : LED LIGHT BAR AND BAR GRAPH ARRAYS
- (1) PRODUCT TYPE → → →
- (2) SIZE
- (3) EMITTING COLOR
- (4) DRIVING CIRCUIT
- (5) SURFACE COLOR & SEGMENT COLOR COMBINATION
- (6) DISPLAY CATEGORY
- (7) DECIMAL POINT IDENTIFICATION
- (8) SPECAIL DISPLAY CATEGORY
- (9) SPECAIL DEVICE
- (2) SIZE :
- 28 : 0.28"    3x : 0.30" ~ 0.39"    4x : 0.40" ~ 0.49"    5x : 0.50" ~ 0.59"  
 6x : 0.60" ~ 0.69"    8x : 0.80" ~ 0.89"    99/10x : 1.00" ~ 1.10"  
 12x ~ 1.8x : 1.20" ~ 1.80"    20x ~ 29x : 2.00" ~ 2.90"  
 30x ~ 39x : 3.00" ~ 3.90"    40x ~ 49x : 4.00" ~ 4.90"
- (3) EMITTING COLOR :
- |  |  |
|--|--|
| 0 : GaAlAs/GaAs 660nm / Super Red            | 0R1 : GaAlAs 660nm / DH Red              |
| 0R2 : GaAlAs/GaAlAs 660nm/ DDH Super Red     | 2 : GaP 700nm / Bright Red               |
| 3 : GaAsP/GaP 635nm / Hi-Eff Red             | 4 : GaAsP/GaP 635nm / Orange             |
| 4O1 / 4O3 : AlGaInP 620nm / Super Orange Red | 4O2 : AlGaInP 630nm / Super Orange Red   |
| 5 : GaAsP/ GaP 583nm / Yellow                | 5Y1 / 5Y3 : AlGaInP 590nm / Super Yellow |
| 5Y2 : AlGaInP 595nm / Super Yellow           | 6 : GaP/GaP 568nm / Yellow Green         |
| 6G1 : GaP/GaP 568nm / Hi-Eff Green           | 6P : GaP/GaP 557nm / Pure Green          |
| 6G2 : AlGaInP 570nm / Super Yellow Green     | 6G3 : InGaN 505nm / Bluish Green         |
| 6G4 : InGaN 525nm / Green                    | 6G5 : AlGaInP 525nm / Green              |
| 7 : GaAsP/ GaP 610nm / Amber                 | 7A1 : AlGaInP 610nm / Amber              |
| 7A2 : AlGaInP 613nm / Amber                  | 8 : AlInGaN 460nm / Super Blue           |
| 8B1 : AlInGaN 470nm / Super Blue             |  |
- (4) DRIVING CIRCUIT :
- |                                   |                                     |
|-----------------------------------|-------------------------------------|
| A : Direct Drive, Common Anode    | C : Direct Drive, Common Cathode    |
| E : Duplex Drive, Common Anode    | F : Duplex Drive, Common Cathode    |
| M : Multiplex Drive, Common Anode | N : Multiplex Drive, Common Cathode |
| U : Universal Pin Out             |                                     |
- (5) SURFACE COLOR & SEGMENT COLOR COMBINATION :
- |                                  |                                |
|----------------------------------|--------------------------------|
| 4 : Black Surface, White Segment | 5 : Black Surface, Red Segment |
| 6 : Gray Surface, White Segment  | 7 : Red Surface, White Segment |
| 8 : Red Surface, Red Segment     | 9 : Gray Surface, Red Segment  |
| 0 : White Surface, White Segment |                                |
- (6) DISPLAY CATEGORY :
- No Code : Single-Digit    2 : Dual-Digit  
 3 : Three-Digit    4 : Four-Digit  
 5 : Five-Digit    6 : Six-Digit
- (7) DECIMAL POINT IDENTIFICATION
- |                                    |                             |
|------------------------------------|-----------------------------|
| No Code : Right Hand Decimal Point | L : Left Hand Decimal Point |
| B : Both Side Decimal Point        | N : No Decimal Point        |
- (8) SPECAIL DISPLAY CATEGORY :
- |                           |                         |
|---------------------------|-------------------------|
| F : Overflow Single-Digit | G : Overflow Dual-Digit |
| C : Alpha Numeric Display |                         |
- (9) SPECAIL DEVICE
- |                              |                    |
|------------------------------|--------------------|
| -xxmm : Pin Length           | No code : Standard |
| Demand order                 |                    |
| Other code : Customer design |                    |





# SINGLE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.	
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length p(nm)	(nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)		
									Typ.	Max.			
0.28" Single Digit	VSD-282A4N	VSD-282C4N	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-01	
	VSD-282A5N	VSD-282C5N											
	VSD-286A4N	VSD-286C4N	GaP/ Green	568	30	80	30	150	2.2	2.5	2.8		
	VSD-285A4N	VSD-285C4N	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.2		
	VSD-283A4N	VSD-283C4N	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	2.8		
	VSD-284A4N	VSD-284C4N	GaAsP/GaP/ Orange										
	VSD-280A4N	VSD-280C4-N	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	5.0		
	VSD-280R1A4N	VSD-280R1C4-N	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	6.0		
	0.28" Single Digit	VSD-282A4	VSD-282C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-02
		VSD-282A5	VSD-282C5										
		VSD-286A4	VSD-286C4	GaP/ Green	568	30	80	30	150	2.2	2.5	2.8	
		VSD-285A4	VSD-285C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.2	
		VSD-283A4	VSD-283C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	2.8	
		VSD-284A4	VSD-284C4	GaAsP/GaP/ Orange									
VSD-280A4		VSD-280C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	5.0		
VSD-280R1A4		VSD-280R1C4	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	6.0		
0.28" Single Digit	VSD-282A4-1	VSD-282C4-1	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-03	
	VSD-282A5-1	VSD-282C5-1											
	VSD-286A4-1	VSD-286C4-1	GaP/ Green	568	30	80	30	150	2.2	2.5	2.8		
	VSD-285A4-1	VSD-285C4-1	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.2		
	VSD-283A4-1	VSD-283C4-1	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	2.8		
	VSD-284A4-1	VSD-284C4-1	GaAsP/GaP/ Orange										
	VSD-280A4-1	VSD-280C4-1	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	5.0		
	VSD-280R1A4-1	VSD-280R1C4-1	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	6.0		
0.3" Single-Digit	VSD-302A4	VSD-302C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-04	
	VSD-302A5	VSD-302C5											
	VSD-306A4	VSD-306C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0		
	VSD-305A4	VSD-305C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0		
	VSD-303A4	VSD-303C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0		
	VSD-304A4	VSD-304C4	GaAsP/GaP/ Orange										
	VSD-300A4	VSD-300C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0		
	VSD-300R1A4	VSD-300R1C4	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
	0.3" Single-Digit	VSD-302A4-1	VSD-302C4-1	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-05
		VSD-302A5-1	VSD-302C5-1										
		VSD-306A4-1	VSD-306C4-1	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
		VSD-305A4-1	VSD-305C4-1	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
		VSD-303A4-1	VSD-303C4-1	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
		VSD-304A4-1	VSD-304C4-1	GaAsP/GaP/ Orange									
VSD-300A4-1		VSD-300C4-1	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0		
VSD-300R1A4-1		VSD-300R1C4-1	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.3" Single-Digit	VSD-302A4-2	VSD-302C4-2	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-06	
	VSD-302A5-2	VSD-302C5-2											
	VSD-306A4-2	VSD-306C4-2	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0		
	VSD-305A4-2	VSD-305C4-2	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0		
	VSD-303A4-2	VSD-303C4-2	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0		
	VSD-304A4-2	VSD-304C4-2	GaAsP/GaP/ Orange										
	VSD-300A4-2	VSD-300C4-2	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0		
	VSD-300R1A4-2	VSD-300R1C4-2	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		



# SINGLE DIGIT LED DISPLAYS

SD-01 VSD-28x <sub>C</sub> A4N	SD-02 VSD-28x <sub>C</sub> A4

NOTES: 1. ALL Dimensions are in millimeters(inches).  
3. Specifications are subject to change without notice.

2. Tolerance is  $\pm 0.25\text{mm}(.010\text{'})$   
4. NP: No Pin. 5. NC: No Connect



# SINGLE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.	
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)		
									Typ.	Max.			
0.30" Single-Digit	VSD-312A4	VSD-312C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-07	
	VSD-312A5	VSD-312C5											
	VSD-316A4	VSD-316C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0		
	VSD-315A4	VSD-315C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0		
	VSD-313A4	VSD-313C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0		
	VSD-314A4	VSD-314C4	GaAsP/GaP/ Orange										
	VSD-310A4	VSD-310C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0		
	VSD-310R1A4	VSD-310R1C4	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
	VSD-312A4-1	VSD-312C4-1	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2		SD-08
	VSD-312A5-1	VSD-312C5-1											
	VSD-316A4-1	VSD-316C4-1	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0		
	VSD-315A4-1	VSD-315C4-1	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0		
	VSD-313A4-1	VSD-313C4-1	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0		
	VSD-314A4-1	VSD-314C4-1	GaAsP/GaP/ Orange										
	VSD-310A4-1	VSD-310C4-1	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0		
	VSD-310R1A4-1	VSD-310R1C4-1	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
	VSD-312A4-2	VSD-312C4-2	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-09	
	VSD-312A5-2	VSD-312C5-2											
	VSD-316A4-2	VSD-316C4-2	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0		
	VSD-315A4-2	VSD-315C4-2	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0		
	VSD-313A4-2	VSD-313C4-2	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0		
	VSD-314A4-2	VSD-314C4-2	GaAsP/GaP/ Orange										
	VSD-310A4-2	VSD-310C4-2	GaAlAs/ SH Super Red	660	20	60	30	150	1.7	2.5	6.0		
	VSD-310R1A4-2	VSD-310R1C4-2	GaAlAs/ DH Super Red	660	20	60	30	150	1.7	2.5	7.0		
	VSD-332A4	VSD-332C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2		SD-10
	VSD-332A5	VSD-332C5											
	VSD-336A4	VSD-336C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0		
	VSD-335A4	VSD-335C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0		
VSD-333A4	VSD-333C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0			
VSD-334A4	VSD-334C4	GaAsP/GaP/ Orange											
VSD-330A4	VSD-330C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0			
VSD-330R1A4	VSD-330R1C4	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0			
0.31" Single-Digit	VSD-342A4	VSD-342C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-11	
	VSD-342A5	VSD-342C5											
	VSD-346A4	VSD-346C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0		
	VSD-345A4	VSD-345C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0		
	VSD-343A4	VSD-343C4	GaAsP/GaP/ Hi-Eff.Red	635	45	100	30	150	2.0	2.5	3.0		
	VSD-344A4	VSD-344C4	GaAsP/GaP/ Orange										
	VSD-340A4	VSD-340C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0		
	VSD-340R1A4	VSD-340R1C4	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.36" Single-Digit	VSD-362A4	VSD-362C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-12	
	VSD-362A5	VSD-362C5											
	VSD-366A4	VSD-366C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0		
	VSD-365A4	VSD-365C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0		
	VSD-363A4	VSD-363C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0		
	VSD-364C4	VSD-364C4	GaAsP/GaP/ Orange										
	VSD-360A4	VSD-360C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0		
	VSD-360R1A4	VSD-360R1C4	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		



# SINGLE DIGIT LED DISPLAYS

SD-07 VSD-31x $\frac{A}{C}4$	SD-08 VSD-31x $\frac{A}{C}4-1$
SD-09 VSD-31x $\frac{A}{C}4-2$	SD-10 VSD-33x $\frac{A}{C}4$
SD-11 VSD-34x $\frac{A}{C}4$	SD-12 VSD-36x $\frac{A}{C}4$

NOTES: 1.ALL Dimensions are in millimeters(.inches).

3.Specifications are subject to change without notice.

2.Tolerance is $\pm 0.25\text{mm}(.010\text{'})$

4.NP:No Pin. 5.NC:No Connect



# SINGLE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length p(nm)	(nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.31" Single-Digit	VSD-352A4	VSD-352C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-13
	VSD-352A5	VSD-352C5										
	VSD-356A4	VSD-356C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-355A4	VSD-355C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-353A4	VSD-353C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-354A4	VSD-354C4	GaAsP/GaP/ Orange									
	VSD-350A4	VSD-350C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-350R1A4	VSD-350R1C4	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.39" Single-Digit	VSD-392A4	VSD-392C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-14
	VSD-392A5	VSD-392C5										
	VSD-396A4	VSD-396C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-395A4	VSD-395C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-393A4	VSD-393C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-394A4	VSD-394C4	GaAsP/GaP/ Orange									
	VSD-390A4	VSD-390C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-390R1A4	VSD-390R1C4	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.39" Alpha-Numeric Displays	VSD-392A4-1	VSD-392C4-1	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-15
	VSD-392A5-1	VSD-392C5-1										
	VSD-396A4-1	VSD-396C4-1	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-395A4-1	VSD-395C4-1	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-393A4-1	VSD-393C4-1	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-394A4-1	VSD-394C4-1	GaAsP/GaP/ Orange									
	VSD-390A4-1	VSD-390C4-1	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-390R1A4-1	VSD-390R1C4-1	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.39" Alpha-Numeric Displays	VSD-392A4C	VSD-392C4C	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-16
	VSD-392A5C	VSD-392C5C										
	VSD-396A4C	VSD-396C4C	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-395A4C	VSD-395C4C	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.2	
	VSD-393A4C	VSD-393C4C	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-394A4C	VSD-394C4C	GaAsP/GaP/ Orange									
	VSD-390A4C	VSD-390C4C	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-390R1A4C	VSD-390R1C4C	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	10.0		
0.40" Single-Digit	VSD-402A4	VSD-402C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-17
	VSD-402A4	VSD-402C4										
	VSD-406A4	VSD-406C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-405A4	VSD-405C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-403A4	VSD-403C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-404A4	VSD-404C4	GaAsP/GaP/ Orange									
	VSD-400A4	VSD-400C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-400R1A4	VSD-400R1C4	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.43" Single-Digit	VSD-432A4	VSD-432C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-18
	VSD-432A5	VSD-432C5										
	VSD-436A4	VSD-436C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-435A4	VSD-435C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-433A4	VSD-433C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-434A4	VSD-434C4	GaAsP/GaP/ Orange									
	VSD-430A4	VSD-430C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
VSD-430R1A4	VSD-430R1C4	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		





# SINGLE DIGIT LED DISPLAYS

SD-13 VSD-35x <sup>A</sup> C4	SD-14 VSD-39x <sup>A</sup> C4
<p>Technical drawing of SD-13 VSD-35x<sup>A</sup>C4 LED display. Dimensions include: 4.0(.157) top width, 8.0(.315) left height, 11.0(.433) right height, 7.0(.276) bottom width, 10° angle, 1.0(.04) pin height, 2.0x4=8.0(.315) pin pitch, 5.0(.197) bottom height, 3.0(.118) MIN. bottom offset, 5.08(.200) bottom width, 0.45(.018) bottom offset, 9 pins, and pin configuration A: 1 10 8 5 4 2 3 6, C: 1 10 8 5 4 2 3 6.</p>	<p>Technical drawing of SD-14 VSD-39x<sup>A</sup>C4 LED display. Dimensions include: 6.20(.244) top width, 10.00(.390) left height, 12.90(.508) right height, 9.80(.386) bottom width, 10° angle, 1.2(.047) diameter, 2.54(.100) pin height, 0.50(.020) pin offset, 0.90(.035) pin width, 6.90(.272) bottom height, 3.00(.118) MIN. bottom offset, 0.25(.010) bottom offset, 7.50(.295) bottom width, 3.8 pins, and pin configuration A: 10 9 7 5 4 2 1 6, C: 10 9 7 5 4 2 1 6.</p>
SD-15 VSD-39x <sup>A</sup> C4-1	SD-16 VSD-39x <sup>A</sup> C4C
<p>Technical drawing of SD-15 VSD-39x<sup>A</sup>C4-1 LED display. Dimensions include: 6.20(.244) top width, 10.00(.390) left height, 12.90(.508) right height, 9.80(.386) bottom width, 10° angle, 1.2(.047) diameter, 2.54(.100) pin height, 0.50(.020) pin offset, 0.90(.035) pin width, 6.90(.272) bottom height, 3.00(.118) MIN. bottom offset, 0.25(.010) bottom offset, 7.50(.295) bottom width, 1.6 pins, and pin configuration A: 10 9 8 5 4 2 3 7, C: 10 9 8 5 4 2 3 7.</p>	<p>Technical drawing of SD-16 VSD-39x<sup>A</sup>C4C LED display. Dimensions include: 6.3(.248) top width, 10.0(.390) left height, 23.6(.929) right height, 9.9(.389) bottom width, 10° angle, 1.2(.047) diameter, 2.54(.10)x8=20.32(.80) pin pitch, 7.0(.276) bottom height, 4.5(.177) TYP. bottom offset, 0.50(.020) bottom offset, 7.62(.300) bottom width, 4.13,17 pins, and pin configuration A: 18 15 11 8 6 3 5 14 2 1 16 10 9 7 12, C: 18 15 11 8 6 3 5 14 2 1 16 10 9 7 12.</p>
SD-17 VSD-40x <sup>A</sup> C4	SD-18 VSD-43x <sup>A</sup> C4
<p>Technical drawing of SD-17 VSD-40x<sup>A</sup>C4 LED display. Dimensions include: 5.40(.213) top width, 10.16(.400) left height, 18.70(.736) right height, 9.80(.386) bottom width, 8° angle, 1.4(.055) diameter, 2.54(.100) pin height, 0.50(.020) pin offset, 5.10(.201) bottom height, 3.00(.118) MIN. bottom offset, 0.25(.01) bottom offset, 7.20(.283) bottom width, 3,14 pins, and pin configuration A: 1 13 10 8 7 2 11 9, NP: 4,5,6,12, C: 14 13 8 7 6 1 2 9, NP: 3,5,10,11.</p>	<p>Technical drawing of SD-18 VSD-43x<sup>A</sup>C4 LED display. Dimensions include: 6.90(.272) top width, 10.80(.430) left height, 18.90(.744) right height, 12.60(.496) bottom width, 10° angle, 1.6(.063) diameter, 2.54x6=15.24(.600) pin pitch, 7.80(.307) bottom height, 3.00(.118) MIN. bottom offset, 0.50(.020) bottom offset, 7.62(.300) bottom width, 3,14 pins, and pin configuration A: 6 1 13 10 8 7 2 11 9, NP: 4,5,12, C: 6 1 13 10 8 7 2 11 9, NP: 4,5,12.</p>

NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is±0.25mm(.010")  
4.NP:No Pin. 5.NC:No Connect





# SINGLE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length p(nm)	(nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.50" Single-Digit	VSD-502A4	VSD-502C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-19
	VSD-502A5	VSD-502C5										
	VSD-506A4	VSD-506C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-505A4	VSD-505C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-503A4	VSD-503C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-504A4	VSD-504C4	GaAsP/GaP/ Orange									
	VSD-500A4	VSD-500C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.0	
	VSD-500R1A4	VSD-500R1C4	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	8.0	
0.50" Overflow Single-Digit	VSD-502A4F	VSD-502C4F	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-20
	VSD-502A5F	VSD-502C5F										
	VSD-506A4F	VSD-506C4F	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-505A4F	VSD-505C4F	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-503A4F	VSD-503C4F	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-504A4F	VSD-504C4F	GaAsP/GaP/ Orange									
	VSD-500A4F	VSD-500C4F	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.0	
	VSD-500R1A4F	VSD-500R1C4F	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	8.0	
0.50" Overflow Single-Digit	VSD-512A4F	VSD-512C4F	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-21
	VSD-512A5F	VSD-512C5F										
	VSD-516A4F	VSD-516C4F	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-515A4F	VSD-515C4F	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-513A4F	VSD-513C4F	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-514A4F	VSD-514C4F	GaAsP/GaP/ Orange									
	VSD-510A4F	VSD-510C4F	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
	VSD-510R1A4F	VSD-510R1C4F	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5	
0.50" Alpha-Numeric Displays	VSD-502A4C	VSD-502C4C	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-22
	VSD-502A5C	VSD-502C5C										
	VSD-506A4C	VSD-506C4C	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-505A4C	VSD-505C4C	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-503A4C	VSD-503C4C	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-504A4C	VSD-504C4C	GaAsP/GaP/ Orange									
	VSD-500A4C	VSD-500C4C	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
	VSD-500R1A4C	VSD-500R1C4C	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5	
	VSD-502A4C-1	VSD-502C4C-1	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-23
	VSD-502A5C-1	VSD-502C5C-1										
	VSD-506A4C-1	VSD-506C4C-1	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-505A4C-1	VSD-505C4C-1	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-503A4C-1	VSD-503C4C-1	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-504A4C-1	VSD-504C4C-1	GaAsP/GaP/ Orange									
	VSD-500A4C-1	VSD-500C4C-1	GaAlAs/ SH Super Red	660	20	60	30	150	1.7	2.5	6.5	
	VSD-500R1A4C-1	VSD-500R1C4C-1	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5	
0.52" Single-Digit	VSD-522A4	VSD-522C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-24
	VSD-522A5	VSD-522C5										
	VSD-526A4	VSD-526C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-525A4	VSD-525C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-523A4	VSD-523C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-524A4	VSD-524C4	GaAsP/GaP/ Orange									
	VSD-520A4	VSD-520C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.0	
	VSD-520R1A4	VSD-520R1C4	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	8.0	



# SINGLE DIGIT LED DISPLAYS

SD-19 VSD-50x $\overset{A}{C}$ 4	SD-20 VSD-50x $\overset{A}{C}$ 4F
<p>Technical drawing of SD-19 VSD-50x<math>\overset{A}{C}</math>4 LED display. Dimensions: 7.30(287)mm top width, 12.70(500)mm left height, 19.00(748)mm right height, 12.80(504)mm bottom width, 1.00(039)mm bottom thickness, 15.24(600)mm total height, 12.70(500)mm pin height, 1.00(039)mm pin width, 1.00(039)mm pin spacing, 1.00(039)mm pin offset, 1.00(039)mm pin diameter, 8.00(315)mm pin length, 3.00(118)MIN. pin length, 2.45(096)mm pin length, 3.8mm pin pitch. Pin configurations: A (3,8) and C (3,8).</p>	<p>Technical drawing of SD-20 VSD-50x<math>\overset{A}{C}</math>4F LED display. Dimensions: 7.30(287)mm top width, 12.70(500)mm left height, 19.00(748)mm right height, 12.70(500)mm bottom width, 1.00(039)mm bottom thickness, 15.24(600)mm total height, 12.70(500)mm pin height, 1.00(039)mm pin width, 1.00(039)mm pin spacing, 1.00(039)mm pin offset, 1.00(039)mm pin diameter, 8.00(315)mm pin length, 3.00(118)MIN. pin length, 2.45(096)mm pin length, 3.8mm pin pitch. Pin configurations: A (3,8) and C (3,8).</p>
<p>Technical drawing of SD-21 VSD-51x<math>\overset{A}{C}</math>4F LED display. Dimensions: 7.30(287)mm top width, 12.70(500)mm left height, 19.00(748)mm right height, 12.70(500)mm bottom width, 1.00(039)mm bottom thickness, 15.24(600)mm total height, 12.70(500)mm pin height, 1.00(039)mm pin width, 1.00(039)mm pin spacing, 1.00(039)mm pin offset, 1.00(039)mm pin diameter, 8.00(315)mm pin length, 3.00(118)MIN. pin length, 2.54(100)mm pin length, 3.8mm pin pitch. Pin configurations: A (3,8) and C (3,8).</p>	<p>Technical drawing of SD-22 VSD-50x<math>\overset{A}{C}</math>4C LED display. Dimensions: 8.25(325)mm top width, 12.70(500)mm left height, 25.00(984)mm right height, 16.00(630)mm bottom width, 1.00(039)mm bottom thickness, 2.54x8=20.32(800)mm total height, 12.70(500)mm pin height, 1.00(039)mm pin width, 1.00(039)mm pin spacing, 1.00(039)mm pin offset, 1.00(039)mm pin diameter, 9.50(374)mm pin length, 3.00(118)MIN. pin length, 12.70(50)mm pin length, 3.8mm pin pitch. Pin configurations: A (18) and C (3,8).</p>
<p>Technical drawing of SD-23 VSD-50x<math>\overset{A}{C}</math>4C-1 LED display. Dimensions: 8.25(325)mm top width, 12.70(500)mm left height, 25.00(984)mm right height, 16.00(630)mm bottom width, 1.00(039)mm bottom thickness, 2.54x8=20.32(800)mm total height, 12.70(50)mm pin height, 1.00(039)mm pin width, 1.00(039)mm pin spacing, 1.00(039)mm pin offset, 1.00(039)mm pin diameter, 9.50(374)mm pin length, 3.00(118)MIN. pin length, 12.70(50)mm pin length, 3.8mm pin pitch. Pin configurations: A (11) and C (3,8).</p>	<p>Technical drawing of SD-24 VSD-52x<math>\overset{A}{C}</math>4 LED display. Dimensions: 7.60(299)mm top width, 13.20(520)mm left height, 17.50(689)mm right height, 12.40(488)mm bottom width, 1.00(039)mm bottom thickness, 15.24(600)mm total height, 12.40(488)mm pin height, 1.00(039)mm pin width, 1.00(039)mm pin spacing, 1.00(039)mm pin offset, 1.00(039)mm pin diameter, 7.00(276)mm pin length, 3.00(118)MIN. pin length, 2.54(100)mm pin length, 3.8mm pin pitch. Pin configurations: A (3,8) and C (3,8).</p>

NOTES: 1. ALL Dimensions are in millimeters (inches).  
3. Specifications are subject to change without notice.

2. Tolerance is  $\pm 0.25\text{mm} (.010\text{'})$   
4. NP: No Pin. 5. NC: No Connect



# SINGLE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length p(nm)	(nm)	Pd (mw)	If (mA)	I <sub>fp</sub> (mA)	V <sub>f</sub> (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.52" Single-Digit	VSD-542A4	VSD-542C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-25
	VSD-542A5	VSD-542C5										
	VSD-546A4	VSD-546C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-545A4	VSD-545C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-543A4	VSD-543C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-544A4	VSD-544C4	GaAsP/GaP/ Orange									
	VSD-540A4	VSD-540C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.0	
	VSD-540R1A4	VSD-540R1C4	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	8.0	
0.56" Single-Digit	VSD-562A4	VSD-562C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-26
	VSD-562A5	VSD-562C5										
	VSD-566A4	VSD-566C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-565A4	VSD-565C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-563A4	VSD-563C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-564A4	VSD-564C4	GaAsP/GaP/ Orange									
	VSD-560A4	VSD-560C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.0	
	VSD-560R1A4	VSD-560R1C4	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	8.0	
0.56" Single-Digit	VSD-572A4	VSD-572C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-27
	VSD-572A5	VSD-572C5										
	VSD-576A4	VSD-576C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-575A4	VSD-575C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-573A4	VSD-573C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-574A4	VSD-574C4	GaAsP/GaP/ Orange									
	VSD-570A4	VSD-570C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.0	
	VSD-570R1A4	VSD-570R1C4	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	8.0	
0.56" Single-Digit	VSD-552A4	VSD-552C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-28
	VSD-552A5	VSD-552C5										
	VSD-556A4	VSD-556C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-555A4	VSD-555C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-553A4	VSD-553C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-554A4	VSD-554C4	GaAsP/GaP/ Orange									
	VSD-550A4	VSD-550C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.0	
	VSD-550R1A4	VSD-550R1C4	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	8.0	
0.56" Single-Digit	VSD-552A4-1	VSD-552C4-1	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-29
	VSD-552A5-1	VSD-552C5-1										
	VSD-556A4-1	VSD-556C4-1	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-555A4-1	VSD-555C4-1	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-553A4-1	VSD-553C4-1	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-554A4-1	VSD-554C4-1	GaAsP/GaP/ Orange									
	VSD-550A4-1	VSD-550C4-1	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.0	
	VSD-550R1A4-1	VSD-550R1C4-1	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	8.0	
0.60" Single-Digit	VSD-602A4	VSD-602C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-30
	VSD-602A5	VSD-602C5										
	VSD-606A4	VSD-606C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-605A4	VSD-605C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-603A4	VSD-603C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-604A4	VSD-604C4	GaAsP/GaP/ Orange									
	VSD-600A4	VSD-600C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.0	
	VSD-600R1A4	VSD-600R1C4	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	8.5	



# SINGLE DIGIT LED DISPLAYS

SD-25 VSD-54x <sup>A</sup> C4	SD-26 VSD-56x <sup>A</sup> C4
<p>SD-27 VSD-57x<sup>A</sup>C4</p>	<p>SD-28 VSD-55x<sup>A</sup>C4</p>
<p>SD-29 VSD-55x<sup>A</sup>C4-1</p>	<p>SD-30 VSD-60x<sup>A</sup>C4</p>

NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is $\pm 0.25\text{mm}(.010\text{'})$   
4.NP:No Pin. 5.NC:No Connect



# SINGLE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length p(nm)	(nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.80" Single-Digit	VSD-802A4B	VSD-802C4B	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-31
	VSD-802A5B	VSD-802C5B										
	VSD-806A4B	VSD-806C4B	GaP/ Green	568	30	80	30	150	2.2	2.5	3.2	
	VSD-805A4B	VSD-805C4B	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.2	
	VSD-803A4B	VSD-803C4B	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.2	
	VSD-804A4B	VSD-804C4B	GaAsP/GaP/ Orange									
	VSD-800A4B	VSD-800C4B	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.5	
VSD-800R1A4B	VSD-800R1C4B	GaAlAs/ DDH Super Red	660	20	80	30	150	2.0	2.5	12.5		
0.80" Overflow Single-Digit	VSD-802U4BF		GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-32
	VSD-802U5BF											
	VSD-806U4BF		GaP/ Green	568	30	80	30	150	2.2	2.5	3.2	
	VSD-805U4BF		GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.2	
	VSD-803U4BF		GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.2	
	VSD-804U4BF		GaAsP/GaP/ Orange									
	VSD-800U4BF		GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.5	
VSD-800R1U4BF		GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	9.0		
0.80" Alpha-Numeric Single-Digit	VSD-802A4C	VSD-802C4C	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-33
	VSD-802A5C	VSD-802C5C										
	VSD-806A4C	VSD-806C4C	GaP/ Green	568	30	80	30	150	2.2	2.5	3.2	
	VSD-805A4C	VSD-805C4C	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.2	
	VSD-803A4C	VSD-803C4C	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.2	
	VSD-804A4C	VSD-804C4C	GaAsP/GaP/ Orange									
	VSD-800A4C	VSD-800C4C	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.5	
VSD-800R1A4C	VSD-800R1C4C	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	9.0		
0.80" Alpha-Numeric Displays	VSD-832A4NC	VSD-832C4NC	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-34
	VSD-832A5NC	VSD-832C5NC										
	VSD-836A4NC	VSD-836C4NC	GaP/ Green	568	30	80	30	150	2.2	2.5	3.2	
	VSD-835A4NC	VSD-835C4NC	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.2	
	VSD-833A4NC	VSD-833C4NC	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.2	
	VSD-834A4NC	VSD-834C4NC	GaAsP/GaP/ Orange									
	VSD-830A4NC	VSD-830C4NC	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.5	
VSD-830R1A4NC	VSD-830R1C4NC	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	8.5		
0.80" Single-Digit	VSD-842A4B	VSD-842C4B	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-35
	VSD-842A5B	VSD-842C5B										
	VSD-846A4B	VSD-846C4B	GaP/ Green	568	30	80	30	150	2.2	2.5	3.2	
	VSD-845A4B	VSD-845C4B	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.2	
	VSD-843A4B	VSD-843C4B	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.2	
	VSD-844A4B	VSD-844C4B	GaAsP/GaP/ Orange									
	VSD-840A4B	VSD-840C4B	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.5	
VSD-840R1A4B	VSD-840R1C4B	GaAlAs/ DDH Super Red	660	20	80	30	150	2.0	2.5	12.5		
0.80" Single-Digit	VSD-802A4	VSD-802C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-36
	VSD-802A5	VSD-802C5										
	VSD-806A4	VSD-806C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.2	
	VSD-805A4	VSD-805C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.2	
	VSD-803A4	VSD-803C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.2	
	VSD-804A4	VSD-804C4	GaAsP/GaP/ Orange									
	VSD-800A4	VSD-800C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.5	
VSD-800R1A4	VSD-800R1C4	GaAlAs/ DDH Super Red	660	20	80	30	150	2.0	2.5	12.5		





# SINGLE DIGIT LED DISPLAYS

SD-31 VSD-80x <sup>A</sup> <sub>C</sub> 4B	SD-32 VSD-80xU 4BF
SD-33 VSD-80x <sup>A</sup> <sub>C</sub> 4C	SD-34 VSD-83xA 4NC
SD-35 VSD-84x <sup>A</sup> <sub>C</sub> 4B	SD-36 VSD-80x <sup>A</sup> <sub>C</sub> 4

NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is±0.25mm(.010")  
4.NP:No Pin. 5.NC:No Connect





# SINGLE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length p(nm)	(nm)	Pd (mw)	If (mA)	I <sub>fp</sub> (mA)	V <sub>f</sub> (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.80" Single-Digit	VSD-862A4	VSD-862C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-37
	VSD-862A5	VSD-862C5										
	VSD-866A4	VSD-866C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.2	
	VSD-865A4	VSD-865C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.2	
	VSD-863A4	VSD-863C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.2	
	VSD-864A4	VSD-864C4	GaAsP/GaP/ Orange									
	VSD-860A4	VSD-860C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.5	
	VSD-860R1A4	VSD-860R1C4	GaAlAs/ DDH Super Red	660	20	80	30	150	2.0	2.5	12.5	
Single-Digit	VSD-872A4	VSD-872C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-38
	VSD-872A5	VSD-872C5										
	VSD-876A4	VSD-876C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.2	
	VSD-875A4	VSD-875C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.2	
	VSD-873A4	VSD-873C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.2	
	VSD-874A4	VSD-874C4	GaAsP/GaP/ Orange									
	VSD-870A4	VSD-870C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.5	
	VSD-870R1A4	VSD-870R1C4	GaAlAs/ DDH Super Red	660	20	80	30	150	2.0	2.5	12.5	
Single-Digit	VSD-992A4	VSD-992C4	GaP/ Bright Red	700	90	80	15	50	4.4	5.0	3.5	SD-39
	VSD-992A5	VSD-992C5										
	VSD-996A4	VSD-996C4	GaP/ Green	568	30	160	30	150	4.4	5.0	5.0	
	VSD-995A4	VSD-995C4	GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0	4.0	
	VSD-993A4	VSD-993C4	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.0	
	VSD-994A4	VSD-994C4	GaAsP/GaP/ Orange									
	VSD-990A4	VSD-990C4	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	10.0	
	VSD-990R1A4	VSD-990R1C4	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	15.0	
1.00" Single-Digit	VSD-1012A4	VSD-1012C4	GaP/ Bright Red	700	90	80	15	50	4.4	5.0	3.5	SD-40
	VSD-1012A5	VSD-1012C5										
	VSD-1016A4	VSD-1016C4	GaP/ Green	568	30	160	30	150	4.4	5.0	5.0	
	VSD-1015A4	VSD-1015C4	GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0	4.0	
	VSD-1013A4	VSD-1013C4	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.0	
	VSD-1014A4	VSD-1014C4	GaAsP/GaP/ Orange									
	VSD-1010A4	VSD-1010C4	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	10.0	
	VSD-1010R1A4	VSD-1010R1C4	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	15.0	
Single-Digit	VSD-1022A4	VSD-1022C4	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-41
	VSD-1022A5	VSD-1022C5										
	VSD-1026A4	VSD-1026C4	GaP/ Green	568	30	80	30	150	2.2	2.5	3.2	
	VSD-1025A4	VSD-1025C4	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.2	
	VSD-1023A4	VSD-1023C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.2	
	VSD-1024A4	VSD-1024C4	GaAsP/GaP/ Orange									
	VSD-1020A4	VSD-1020C4	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.5	
	VSD-1020R1A4	VSD-1020R1C4	GaAlAs/ DDH Super Red	660	20	80	30	150	2.0	2.5	12.5	
1.00" Alpha-Numeric Displays	VSD-1002A4C	VSD-1002C4C	GaP/ Bright Red	700	90	80	15	50	4.4	5.0	3.5	SD-42
	VSD-1002A5C	VSD-1002C5C										
	VSD-1006A4C	VSD-1006C4C	GaP/ Green	568	30	160	30	150	4.4	5.0	5.0	
	VSD-1005A4C	VSD-1005C4C	GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0	4.0	
	VSD-1003A4C	VSD-1003C4C	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.0	
	VSD-1004A4C	VSD-1004C4C	GaAsP/GaP/ Orange									
	VSD-1000A4C	VSD-1000C4C	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	10.0	
	VSD-1000R1A4C	VSD-1000R1C4C	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	15.0	



# SINGLE DIGIT LED DISPLAYS

SD-37 VSD-86x $\frac{A}{C}$ 4	SD-38 VSD-87x $\frac{A}{C}$ 4

NOTES: 1.ALL Dimensions are in millimeters(inches).  
 2.Tolerance is±0.25mm(.010")  
 3.Specifications are subject to change without notice.

4.NP:No Pin. 5.NC:No Connect



# SINGLE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.		
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length p(nm)	(nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)			
									Typ.	Max.				
1.00" Single-Digit	VSD-1002A4	VSD-1002C4	GaP/ Bright Red	700	90	80	15	50	4.4	5.0	3.5	SD-43		
	VSD-1002A5	VSD-1002C5												
	VSD-1006A4	VSD-1006C4	GaP/ Green	568	30	160	30	150	4.4	5.0	5.0			
	VSD-1005A4	VSD-1005C4	GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0	4.0			
	VSD-1003A4	VSD-1003C4	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.0			
	VSD-1004A4	VSD-1004C4											GaAsP/GaP/ Orange	
	VSD-1000A4	VSD-1000C4	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	10.0			
	VSD-1000R1A4	VSD-1000R1C4	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	15.0			
	1.00" Single-Digit	VSD-1042A4	VSD-1042C4	GaP/ Bright Red	700	90	80	15	50	4.4	5.0		3.5	SD-44
		VSD-1042A5	VSD-1042C5											
		VSD-1046A4	VSD-1046C4	GaP/ Green	568	30	160	30	150	4.4	5.0		5.0	
		VSD-1045A4	VSD-1045C4	GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0		4.0	
		VSD-1043A4	VSD-1043C4	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0		5.0	
		VSD-1044A4	VSD-1044C4											
VSD-1040A4		VSD-1040C4	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	10.0			
VSD-1040R1A4		VSD-1040R1C4	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	15.0			
1.00" Alpha-Numeric Displays	VSD-1052A4BC	VSD-1052C4BC	GaP/ Bright Red	700	90	80	15	50	4.4	5.0	3.5	SD-45		
	VSD-1052A5BC	VSD-1052C5BC												
	VSD-1056A4BC	VSD-1056C4BC	GaP/ Green	568	30	160	30	150	4.4	5.0	5.0			
	VSD-1055A4BC	VSD-1055C4BC	GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0	4.0			
	VSD-1053A4BC	VSD-1053C4BC	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.0			
	VSD-1054A4BC	VSD-1054C4BC											GaAsP/GaP/ Orange	
	VSD-1050A4BC	VSD-1050C4BC	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	10.0			
VSD-1050R1A4BC	VSD-1050R1C4BC	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	15.0				
1.20" Alpha-Numeric Digit	VSD-1212A4C	VSD-1212C4C	GaP/ Bright Red	700	90	80	15	50	4.4	5.0	3.5	SD-46		
	VSD-1212A5C	VSD-1212C5C												
	VSD-1216A4C	VSD-1216C4C	GaP/ Green	568	30	160	30	150	4.4	5.0	5.0			
	VSD-1215A4C	VSD-1215C4C	GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0	4.0			
	VSD-1213A4C	VSD-1213C4C	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.0			
	VSD-1214A4C	VSD-1214C4C											GaAsP/GaP/ Orange	
	VSD-1210A4C	VSD-1210C4C	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	10.0			
VSD-1210R1A4C	VSD-1210R1C4C	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	15.0				
1.20" Single-Digit	VSD-1202A4	VSD-1202C4	GaP/ Bright Red	700	90	80	15	50	4.4	5.0	3.5	SD-47		
	VSD-1202A5	VSD-1202C5												
	VSD-1206A4	VSD-1206C4	GaP/ Green	568	30	160	30	150	4.4	5.0	5.0			
	VSD-1205A4	VSD-1205C4	GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0	4.0			
	VSD-1203A4	VSD-1203C4	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.0			
	VSD-1204A4	VSD-1204C4											GaAsP/GaP/ Orange	
	VSD-1200A4	VSD-1200C4	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	10.0			
	VSD-1200R1A4	VSD-1200R1C4	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	15.0			
	1.20" Single-Digit	VSD-1222A4	VSD-1222C4	GaP/ Bright Red	700	90	80	15	50	4.4	5.0		3.5	SD-48
		VSD-1222A5	VSD-1222C5											
		VSD-1226A4	VSD-1226C4	GaP/ Green	568	30	160	30	150	4.4	5.0		5.0	
		VSD-1225A4	VSD-1225C4	GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0		4.0	
		VSD-1223A4	VSD-1223C4	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0		5.0	
		VSD-1224A4	VSD-1224C4											
VSD-1220A4		VSD-1220C4	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	10.0			
VSD-1220R1A4		VSD-1220R1C4	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	15.0			



# SINGLE DIGIT LED DISPLAYS

SD-43 VSD-100x $\overset{A}{C}4$	SD-44 VSD-104x $\overset{A}{C}4$
<p>Technical drawing of SD-43 VSD-100x <math>\overset{A}{C}4</math> LED display. Dimensions include: 14.10(.555) width, 10° angle, 25.40(1.00) height, 33.90(1.335) total height, 24.00(.945) base width, 2.54(.100) pin pitch, 10.50(.413) pin height, 3.00(.118) MIN. pin offset, and <math>\varnothing 2.5(.098)</math> pin diameter. Pin connections are shown for segments A, B, C, D, E, F, G, DP with pin numbers 9, 8, 5, 2, 1, 12, 14, 6. NP: 3,7,10,13.</p>	<p>Technical drawing of SD-44 VSD-104x <math>\overset{A}{C}4</math> LED display. Dimensions include: 14.70(.579) width, 10° angle, 25.4(1.00) height, 33.00(1.299) total height, 22.86(.900) base width, 9.00(.354) pin height, 3.0(.118) MIN. pin offset, and <math>\varnothing 3.0(.118)</math> pin diameter. Pin connections are shown for segments A, B, C, D, E, F, G, DP with pin numbers 9, 8, 5, 2, 1, 12, 14, 6. NP: 3,7,10,13.</p>
<p>Technical drawing of SD-45 VSD-105x <math>\overset{A}{C}4BC</math> LED display. Dimensions include: 13.60(.535) width, 8° angle, 25.4(1.00) height, 33.00(1.299) total height, 22.76(.896) base width, 2.54(.100) pin pitch, 5.08(.200) pin height, 8.90(.350) pin offset, 3.00(.118) MIN. pin offset, and <math>\varnothing 1.84(.072)</math> pin diameter. Pin connections are shown for segments A1, A2, B, C, D1, D2, E, F, G1, G2, J, K, L, M, N, P with pin numbers 11, 1, 2, 18, 17, 14, 8, 12, 7, 4, 6, 16, 3, 20, 19, 13, 10, 9. NP: 10.</p>	<p>Technical drawing of SD-46 VSD-121x <math>\overset{A}{C}4C</math> LED display. Dimensions include: 17.78(.700) width, 10° angle, 30.48(1.200) height, 40.7(1.60) total height, 28.7(1.13) base width, 2.2(.087) pin offset, 9.0(.354) pin height, 3.0(.118) MIN. pin offset, and <math>\varnothing 0.5(.020)</math> pin diameter. Pin connections are shown for segments A, B, C, D, E, F, G, H, J, K, L, M, N with pin numbers 16, 14, 12, 19, 15, 17, 13, 18, 20, 2, 9, 3, 5, 7, 4, 6, 8. NP: 10.</p>
<p>Technical drawing of SD-47 VSD-120x <math>\overset{A}{C}4</math> LED display. Dimensions include: 17.30(.681) width, 10° angle, 30.40(1.20) height, 40.70(1.602) total height, 28.80(1.134) base width, 2.54(.100) pin pitch, 9.00(.354) pin height, 3.00(.118) MIN. pin offset, and <math>\varnothing 3.0(.118)</math> pin diameter. Pin connections are shown for segments A, B, C, D, E, F, G, DP with pin numbers 7, 6, 4, 3, 2, 9, 10, 5.</p>	<p>Technical drawing of SD-48 VSD-122x <math>\overset{A}{C}4C</math> LED display. Dimensions include: 17.70(.697) width, 10° angle, 30.40(1.20) height, 40.70(1.602) total height, 28.80(1.134) base width, 2.54(.100) pin pitch, 9.00(.354) pin height, 3.00(.118) MIN. pin offset, and <math>\varnothing 3.0(.118)</math> pin diameter. Pin connections are shown for segments A, B, C, D, E, F, G, DP with pin numbers 7, 6, 4, 3, 2, 9, 10, 8.</p>

NOTES: 1. ALL Dimensions are in millimeters (inches).  
 3. Specifications are subject to change without notice.

2. Tolerance is  $\pm 0.25\text{mm} (.010\text{'})$   
 4. NP: No Pin. 5. NC: No Connect





# SINGLE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
1.50" Single-Digit	VSD-1502A4	VSD-1502C4	GaP/ Bright Red	700	90	80	15	50	4.4	5.0	3.5	SD-49
	VSD-1502A5	VSD-1502C5										
	VSD-1506A4	VSD-1506C4	GaP/ Green	568	30	160	30	150	4.4	5.0	5.0	
	VSD-1505A4	VSD-1505C4	GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0	4.0	
	VSD-1503A4	VSD-1503C4	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.0	
	VSD-1504A4	VSD-1504C4	GaAsP/GaP/ Orange									
	VSD-1500A4	VSD-1500C4	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	10.0	
VSD-1500R1A4	VSD-1500R1C4	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	15.0		
1.50" Overflow Single-Digit	VSD-1502A4F	VSD-1502C4F	GaP/ Bright Red	700	90	80	15	50	4.4	5.0	3.5	SD-50
	VSD-1502A5F	VSD-1502C5F										
	VSD-1506A4F	VSD-1506C4F	GaP/ Green	568	30	160	30	150	4.4	5.0	5.0	
	VSD-1505A4F	VSD-1505C4F	GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0	4.0	
	VSD-1503A4F	VSD-1503C4F	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.0	
	VSD-1504A4F	VSD-1504C4F	GaAsP/GaP/ Orange									
	VSD-1500A4F	VSD-1500C4F	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	10.0	
VSD-1500R1A4F	VSD-1500R1C4F	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	15.0		
1.50" Single-Digit	VSD-1512A4	VSD-1512C4	GaP/ Bright Red	700	90	80	15	50	4.4	5.0	3.5	SD-51
	VSD-1512A5	VSD-1512C5										
	VSD-1516A4	VSD-1516C4	GaP/ Green	568	30	160	30	150	4.4	5.0	5.0	
	VSD-1515A4	VSD-1515C4	GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0	4.0	
	VSD-1513A4	VSD-1513C4	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.0	
	VSD-1514A4	VSD-1514C4	GaAsP/GaP/ Orange									
	VSD-1510A4	VSD-1510C4	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	10.0	
VSD-1510R1A4	VSD-1510R1C4	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	15.0		
1.50" Single-Digit	VSD-1522A4	VSD-1522C4	GaP/ Bright Red	700	90	80	15	50	4.4	5.0	3.5	SD-52
	VSD-1522A5	VSD-1522C5										
	VSD-1526A4	VSD-1526C4	GaP/ Green	568	30	160	30	150	4.4	5.0	5.0	
	VSD-1525A4	VSD-1525C4	GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0	4.0	
	VSD-1523A4	VSD-1523C4	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.0	
	VSD-1524A4	VSD-1524C4	GaAsP/GaP/ Orange									
	VSD-1520A4	VSD-1520C4	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	10.0	
VSD-1520R1A4	VSD-1520R1C4	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	15.0		
1.80" Single-Digit	VSD-1802A4	VSD-1802C4	GaP/ Bright Red	700	90	120	15	50	6.6	7.5	5.5	SD-53
	VSD-1802A5	VSD-1802C5										
	VSD-1806A4	VSD-1806C4	GaP/ Green	568	30	240	30	150	6.6	7.5	7.0	
	VSD-1805A4	VSD-1805C4	GaAsP/GaP/ Yellow	585	35	240	30	150	6.3	7.5	6.0	
	VSD-1803A4	VSD-1803C4	GaAsP/GaP/ Hi-Eff.Red	635	45	240	30	150	6.0	7.5	7.0	
	VSD-1804A4	VSD-1804C4	GaAsP/GaP/ Orange									
	VSD-1800A4	VSD-1800C4	GaAlAs/ SH Super Red	660	20	240	30	150	5.1	7.5	12.0	
VSD-1800R1A4	VSD-1800R1C4	GaAlAs/ DDH Super Red	660	20	240	30	150	6.0	7.5	17.0		
1.80" Overflow Single-Digit	VSD-1802A4F	VSD-1802C4F	GaP/ Bright Red	700	90	120	15	50	6.6	7.5	5.5	SD-54
	VSD-1802A5F	VSD-1802C5F										
	VSD-1806A4F	VSD-1806C4F	GaP/ Green	568	30	240	30	150	6.6	7.5	7.0	
	VSD-1805A4F	VSD-1805C4F	GaAsP/GaP/ Yellow	585	35	240	30	150	6.3	7.5	6.0	
	VSD-1803A4F	VSD-1803C4F	GaAsP/GaP/ Hi-Eff.Red	635	45	240	30	150	6.0	7.5	7.0	
	VSD-1804A4F	VSD-1804C4F	GaAsP/GaP/ Orange									
	VSD-1800A4F	VSD-1800C4F	GaAlAs/ SH Super Red	660	20	240	30	150	5.1	7.5	12.0	
VSD-1800R1A4F	VSD-1800R1C4F	GaAlAs/ DDH Super Red	660	20	240	30	150	6.0	7.5	17.0		



# SINGLE DIGIT LED DISPLAYS

SD-49 VSD-150x $\overset{A}{C}4$	SD-50 VSD-150x $\overset{A}{C}4F$
<p>Technical drawing of SD-49 LED display showing dimensions: 21.10(831) width, 38.00(1.500) height, 44.10(1.736) total height, 10° angle, PIN 1. location, 30.60(1.205) pin pitch, Ø4.5(1.177) pin diameter, 8.80(346) and 3.00(118) MIN. pin offset, 2.54(100) pin width, and pin layout A (1.5) and C (1.5).</p>	<p>Technical drawing of SD-50 LED display showing dimensions: 20.90(823) width, 38.00(1.500) height, 44.20(1.740) total height, 10° angle, PIN 1. location, 30.70(1.209) pin pitch, Ø3.5(1.138) pin diameter, 8.80(346) and 3.00(118) MIN. pin offset, 2.54(100) pin width, and pin layout A (1.5) and C (1.5).</p>
<p>Technical drawing of SD-51 LED display showing dimensions: 21.70(854) width, 38.00(1.500) height, 46.90(1.846) total height, 8° angle, PIN 1. location, 33.10(1.303) pin pitch, Ø4.5(1.177) pin diameter, 12.50(492) and 3.00(118) MIN. pin offset, 2.54(100) pin width, and pin layout A (2.6) and C (2.6).</p>	<p>Technical drawing of SD-52 LED display showing dimensions: 21.70(854) width, 38.00(1.500) height, 46.90(1.846) total height, 8° angle, PIN 1. location, 33.10(1.303) pin pitch, Ø4.5(1.177) pin diameter, 12.50(492) and 3.00(118) MIN. pin offset, 2.54(100) pin width, and pin layout A (1.5) and C (1.5).</p>
<p>Technical drawing of SD-53 LED display showing dimensions: 26.00(1.024) width, 44.80(1.764) height, 55.80(2.197) total height, 10° angle, PIN 1. location, 37.80(1.488) pin pitch, Ø4.5(1.177) pin diameter, 10.90(429) and 3.00(118) MIN. pin offset, 2.54(100) pin width, and pin layout A (1.5) and C (1.5).</p>	<p>Technical drawing of SD-54 LED display showing dimensions: 26.00(1.024) width, 44.80(1.764) height, 55.80(2.197) total height, 10° angle, PIN 1. location, 37.80(1.488) pin pitch, Ø4.5(1.177) pin diameter, 10.90(429) and 3.00(118) MIN. pin offset, 2.54(100) pin width, and pin layout A (3.8) and C (3.8).</p>

NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is±0.25mm(.010")  
4.NP:No Pin. 5.NC:No Connect



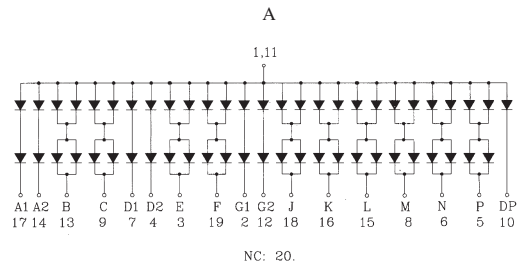
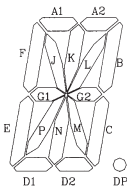
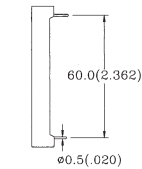
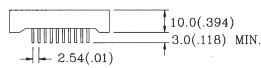
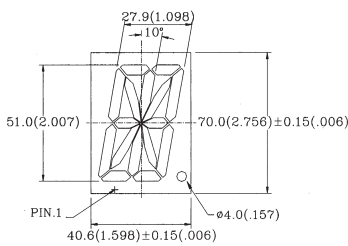


# SINGLE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length p(nm)	(nm)	Pd (mw)	If (mA)	I <sub>fp</sub> (mA)	V <sub>f</sub> (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
2.00" Alpha Numeric Single-Digit	VSD-2002A4C	VSD-2002C4C	GaP/ Bright Red	700	90	130	15	50	8.8	8.4	8.0	SD-55
	VSD-2002A5C	VSD-2002C5C										
	VSD-2006A4C	VSD-2006C4C	GaP/ Green	568	30	250	30	150	8.8	8.4	12.0	
	VSD-2005A4C	VSD-2005C4C	GaAsP/GaP/ Yellow	585	35	250	30	150	8.4	8.4	10.0	
	VSD-2003A4C	VSD-2003C4C	GaAsP/GaP/ Hi-Eff.Red	635	45	250	30	150	8.0	8.4	12.0	
	VSD-2004A4C	VSD-2004C4C	GaAsP/GaP/ Orange									
	VSD-2000A4C	VSD-2000C4C	GaAlAs/ SH Super Red	660	20	250	30	150	6.8	8.4	18.0	
VSD-2000R1A4C	VSD-2000R1C4C	GaAlAs/ DDH Super Red	660	20	250	30	150	8.0	8.4	25.0		
2.30" Single-Digit	VSD-2312A4	VSD-2312C4	GaP/ Bright Red	700	90	80	15	50	4.4	5.0	7.0	SD-56
	VSD-2312A5	VSD-2312C5										
	VSD-2316A4	VSD-2316C4	GaP/ Green	568	30	120	30	150	4.4	5.0	10.0	
	VSD-2315A4	VSD-2315C4	GaAsP/GaP/ Yellow	585	35	120	30	150	4.4	5.0	8.0	
	VSD-2313A4	VSD-2313C4	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	10.0	
	VSD-2314A4	VSD-2314C4	GaAsP/GaP/ Orange									
	VSD-2310A4	VSD-2310C4	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	16.0	
VSD-2310R1A4	VSD-2310R1C4	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	22.0		

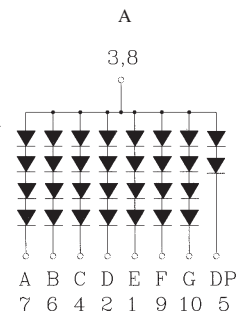
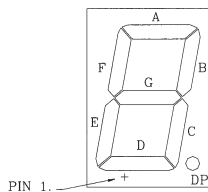
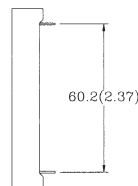
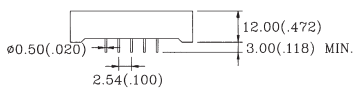
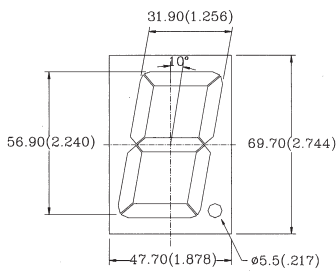
SD-55

VSD-200x  $\frac{A}{C}$ 4C



SD-56

VSD-231x  $\frac{A}{C}$ 4



NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is±0.25mm(.010")  
4.NP:No Pin. 5.NC:No Connect



# SINGLE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
2.30" Single-Digit	VSD-2302A4	VSD-2302C4	GaP/ Bright Red	700	90	160	15	50	8.8	10.0	8.0	SD-57
	VSD-2302A5	VSD-2302C5										
	VSD-2306A4	VSD-2306C4	GaP/ Green	568	30	310	30	150	8.8	10.0	12.0	
	VSD-2305A4	VSD-2305C4	GaAsP/GaP/ Yellow	585	35	310	30	150	8.4	10.0	10.0	
	VSD-2303A4	VSD-2303C4	GaAsP/GaP/ Hi-Eff.Red	635	45	310	30	150	8.0	10.0	12.0	
	VSD-2304A4	VSD-2304C4	GaAsP/GaP/ Orange									
	VSD-2300A4	VSD-2300C4	GaAlAs/ SH Super Red	660	20	310	30	150	6.8	10.0	18.0	
VSD-2300R1A4	VSD-2300R1C4	GaAlAs/ DDH Super Red	660	20	310	30	150	8.0	10.0	25.0		
2.30" Alpha-Numeric Single-Digit	VSD-2302A4C	VSD-2302C4C	GaP/ Bright Red	700	90	80	15	50	4.4	5.0	3.5	SD-58
	VSD-2302A5C	VSD-2302C5C										
	VSD-2306A4C	VSD-2306C4C	GaP/ Green	568	30	160	30	150	4.4	5.0	5.0	
	VSD-2305A4C	VSD-2305C4C	GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0	4.0	
	VSD-2303A4C	VSD-2303C4C	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.4	5.0	5.0	
	VSD-2304A4C	VSD-2304C4C	GaAsP/GaP/ Orange									
	VSD-2300A4C	VSD-2300C4C	GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	10.0	
VSD-2300R1A4C	VSD-2300R1C4C	GaAlAs/ DDH Super Red	660	20	160	30	150	4.0	5.0	15.0		

**SD-57** **VSD-230x A C4**

**SD-58** **VSD-230x A C4C**

NOTES: 1.ALL Dimensions are in millimeters(inches).  
 2.Tolerance is  $\pm 0.25\text{mm}(.010")$   
 3.Specifications are subject to change without notice.  
 4.NP:No Pin. 5.NC:No Connect

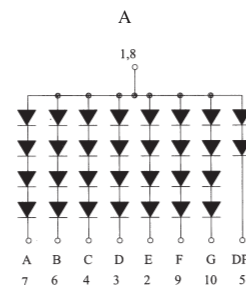
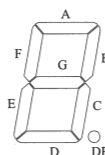
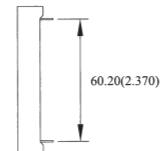
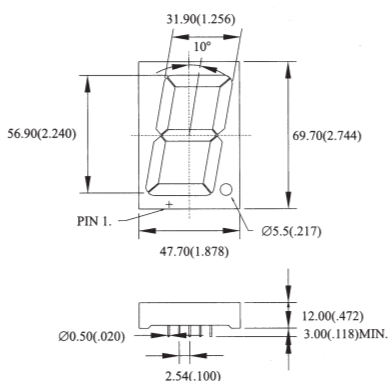


# SINGLE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
2.30" Single-Digit	VSD-2322A4	VSD-2322C4	GaP/ Bright Red	700	90	160	15	50	8.8	10.0	8.0	SD-59
	VSD-2322A5	VSD-2322C5										
	VSD-2326A4	VSD-2326C4	GaP/ Green	568	30	310	30	150	8.8	10.0	12.0	
	VSD-2325A4	VSD-2325C4	GaAsP/GaP/ Yellow	585	35	310	30	150	8.4	10.0	10.0	
	VSD-2323A4	VSD-2323C4	GaAsP/GaP/ Hi-Eff.Red	635	45	310	30	150	8.0	10.0	12.0	
	VSD-2324A4	VSD-2324C4	GaAsP/GaP/ Orange									
	VSD-2320A4	VSD-2320C4	GaAlAs/ SH Super Red	660	20	310	30	150	6.8	10.0	18.0	
VSD-2320R1A4	VSD-2320R1C4	GaAlAs/ DDH Super Red	660	20	310	30	150	8.0	10.0	25.0		
3.00" Single-Digit	VSD-3002A4	VSD-3002C4	GaP/ Bright Red	700	90	230	15	50	12.6	15.0	10.0	SD-60
	VSD-3002A5	VSD-3002C5										
	VSD-3006A4	VSD-3006C4	GaP/ Green	568	30	460	30	150	12.6	15.0	14.0	
	VSD-3005A4	VSD-3005C4	GaAsP/GaP/ Yellow	585	35	460	30	150	12.0	15.0	12.0	
	VSD-3003A4	VSD-3003C4	GaAsP/GaP/ Hi-Eff.Red	635	45	460	30	150	11.5	15.0	14.0	
	VSD-3004A4	VSD-3004C4	GaAsP/GaP/ Orange									
	VSD-3000A4	VSD-3000C4	GaAlAs/ SH Super Red	660	20	460	30	150	10.2	15.0	15.0	
VSD-3000R1A4	VSD-3000R1C4	GaAlAs/ DDH Super Red	660	20	460	30	150	12.0	15.0	25.0		

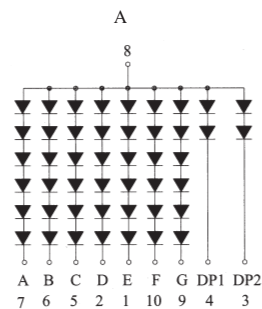
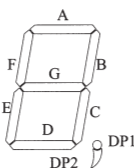
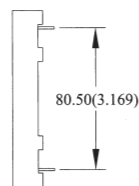
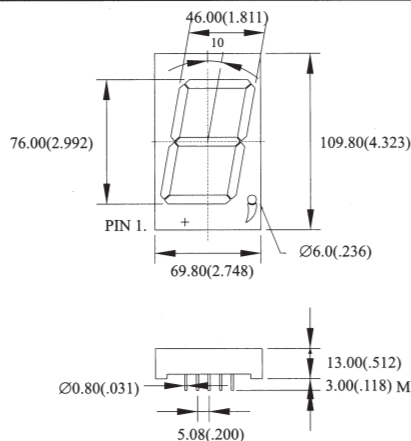
SD-59

VSD-232x $\frac{A}{C}$ 4



SD-60

VSD-300x $\frac{A}{C}$ 4



NOTES: 1. ALL Dimensions are in millimeters(inches).  
3. Specifications are subject to change without notice.

2. Tolerance is  $\pm 0.25\text{mm}(.010\text{'})$   
4. NP: No Pin. 5. NC: No Connect



# SINGLE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length p(nm)	(nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
4.00" Single-Digit	VSD-4002A4	VSD-4002C4	GaP/ Bright Red	700	90	200	15	50	11.0	12.5	9.0	SD-61
	VSD-4002A5	VSD-4002C5										
	VSD-4006A4	VSD-4006C4	GaP/ Green	568	30	390	30	150	11.0	12.5	13.0	
	VSD-4005A4	VSD-4005C4	GaAsP/GaP/ Yellow	585	35	390	30	150	11.0	12.5	10.0	
	VSD-4003A4	VSD-4003C4	GaAsP/GaP/ Hi-Eff.Red	635	45	390	30	150	11.0	12.5	13.0	
	VSD-4004A4	VSD-4004C4	GaAsP/GaP/ Orange									
	VSD-4000A4	VSD-4000C4	GaAlAs/ SH Super Red	660	20	390	30	150	8.5	12.5	20.0	
VSD-4000R1A4	VSD-4000R1C4	GaAlAs/ DDH Super Red	660	20	390	30	150	10.0	12.5	25.0		
4.00" Single-Digit	VSD-4012A4	VSD-4012C4	GaP/ Bright Red	700	90	200	15	50	8.0	10.0	9.0	SD-62
	VSD-4012A5	VSD-4012C5										
	VSD-4016A4	VSD-4016C4	GaP/ Green	568	30	390	30	150	8.0	10.0	13.0	
	VSD-4015A4	VSD-4015C4	GaAsP/GaP/ Yellow	585	35	390	30	150	8.0	10.0	10.0	
	VSD-4013A4	VSD-4013C4	GaAsP/GaP/ Hi-Eff.Red	635	45	390	30	150	8.0	10.0	13.0	
	VSD-4014A4	VSD-4014C4	GaAsP/GaP/ Orange									
	VSD-4010A4	VSD-4010C4	GaAlAs/ SH Super Red	660	20	390	30	150	6.8	10.0	20.0	
VSD-4010R1A4	VSD-4010R1C4	GaAlAs/ DDH Super Red	660	20	390	30	150	8.0	10.0	25.0		

SD-61 VSD-400x<sub>C</sub><sup>A</sup>4

SD-62 VSD-401x<sub>C</sub><sup>A</sup>4

NOTES: 1.ALL Dimensions are in millimeters(inches).  
 3.Specifications are subject to change without notice.

2.Tolerance is±0.25mm(.010")  
 4.NP:No Pin. 5.NC:No Connect



# SINGLE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
4.00" Single-Digit	VSD-4022A4	VSD-4022C4	GaP/ Bright Red	700	90	200	15	50	11.0	12.5	9.0	SD-63
	VSD-4022A5	VSD-4022C5										
	VSD-4026A4	VSD-4026C4	GaP/ Green	568	30	390	30	150	11.0	12.5	13.0	
	VSD-4025A4	VSD-4025C4	GaAsP/GaP/ Yellow	585	35	390	30	150	11.0	12.5	10.0	
	VSD-4023A4	VSD-4023C4	GaAsP/GaP/ Hi-Eff.Red	635	45	390	30	150	11.0	12.5	13.0	
	VSD-4024A4	VSD-4024C4	GaAsP/GaP/ Orange									
	VSD-4020A4	VSD-4020C4	GaAlAs/ SH Super Red	660	20	390	30	150	8.5	12.5	20.0	
	VSD-4020R1A4	VSD-4020R1C4	GaAlAs/ DDH Super Red	660	20	390	30	150	10.0	12.5	25.0	
5.00" Single-Digit	VSD-5002A4	VSD-5002C4	GaP/ Bright Red	700	90	375	15	50	21.0	25.0	18.0	SD-64
	VSD-5002A5	VSD-5002C5										
	VSD-5006A4	VSD-5006C4	GaP/ Green	568	30	750	30	150	21.0	25.0	25.0	
	VSD-5005A4	VSD-5005C4	GaAsP/GaP/ Yellow	585	35	750	30	150	20.0	25.0	20.0	
	VSD-5003A4	VSD-5003C4	GaAsP/GaP/ Hi-Eff.Red	635	45	750	30	150	19.0	25.0	22.0	
	VSD-5004A4	VSD-5004C4	GaAsP/GaP/ Orange									
	VSD-5000A4	VSD-5000C4	GaAlAs/ SH Super Red	660	20	750	30	150	17.0	25.0	30.0	
	VSD-5000R1A4	VSD-5000R1C4	GaAlAs/ DDH Super Red	660	20	750	30	150	20.0	25.0	40.0	

**SD-63** VSD-402x  $\frac{A}{C}4$

**SD-64** VSD-500x  $\frac{A}{C}4$

NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is $\pm 0.25$ mm(.010")  
4.NP:No Pin. 5.NC:No Connect

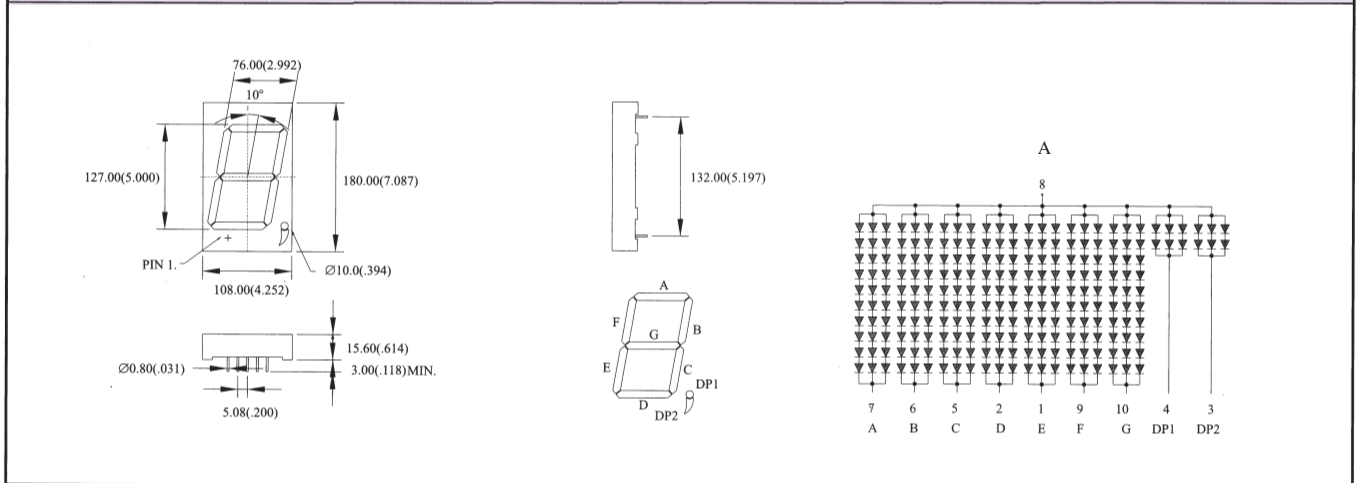




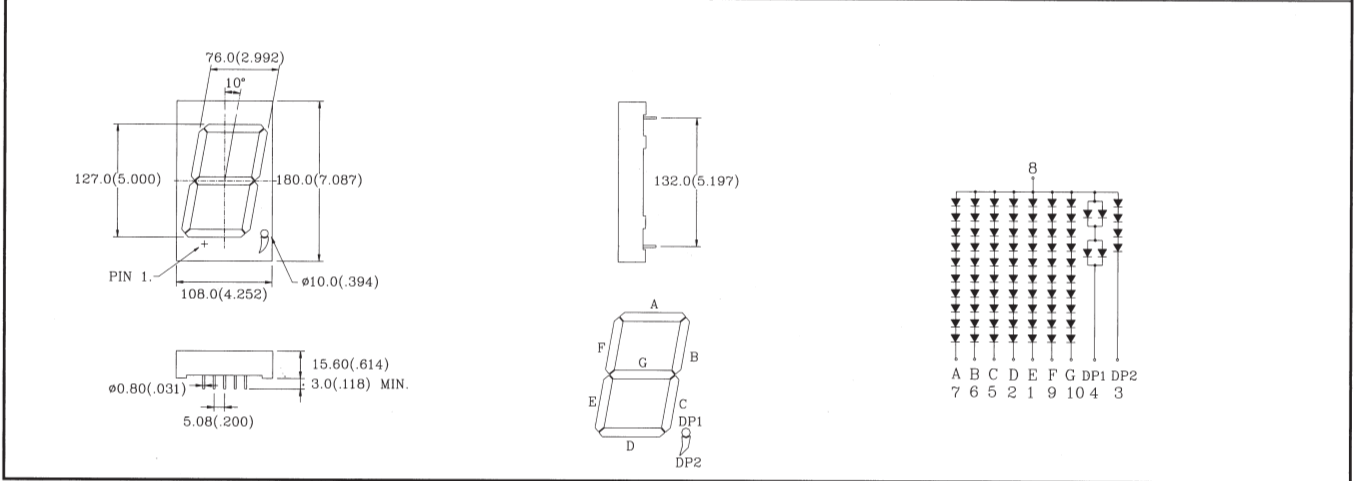
# SINGLE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.	
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length p(nm)	(nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)		
									Typ.	Max.			
5.00" Single-Digit	VSD-5012A4	VSD-5012C4	GaP/ Bright Red	700	90	375	15	50	21.0	25.0	30.0	SD-65	
	VSD-5012A5	VSD-5012C5											
	VSD-5016A4	VSD-5016C4	GaP/ Green	568	30	750	30	150	21.0	25.0	42.0		
	VSD-5015A4	VSD-5015C4	GaAsP/GaP/ Yellow	585	35	750	30	150	20.0	25.0	33.0		
	VSD-5013A4	VSD-5013C4	GaAsP/GaP/ Hi-Eff.Red	635	45	750	30	150	19.0	25.0	37.0		
	VSD-5014A4	VSD-5014C4	GaAsP/GaP/ Orange										
	VSD-5010A4	VSD-5010C4	GaAlAs/ SH Super Red	660	20	750	30	150	17.0	25.0	100.0		
	VSD-5010R1A4	VSD-5010R1C4	GaAlAs/ DDH Super Red	660	20	750	30	150	20.0	25.0	133.0		
	VSD-5022A4	VSD-5022C4	GaP/ Bright Red	700	90	270	15	50	15.0	17.5	30.0		SD-66
	VSD-5022A5	VSD-5022C5											
	VSD-5026A4	VSD-5026C4	GaP/ Green	568	30	540	30	150	15.0	17.5	40.0		
	VSD-5025A4	VSD-5025C4	GaAsP/GaP/ Yellow	585	35	540	30	150	15.0	17.5	30.0		
	VSD-5023A4	VSD-5023C4	GaAsP/GaP/ Hi-Eff.Red	635	45	540	30	150	15.0	17.5	40.0		
	VSD-5024A4	VSD-5024C4	GaAsP/GaP/ Orange										
VSD-5020A4	VSD-5020C4	GaAlAs/ SH Super Red	660	20	450	30	150	12.0	17.5	70.0			
VSD-5020R1A4	VSD-5020R1C4	GaAlAs/ DDH Super Red	660	20	540	30	150	14.0	17.5	90.0			

## SD-65 VSD-501x $\frac{A}{C}4$



## SD-66 VSD-502x $\frac{A}{C}4$



NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is  $\pm 0.25\text{mm}(0.010\text{'})$   
4.NP:No Pin. 5.NC:No Connect





# MULTI-COLOR LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length p(nm)	Vf (v)	Iv. Typ. Per.Seg. (mcd)	Vf (v)	Iv. Typ. Per.Seg. (mcd)	Vf (v)	Iv. Typ. Per.Seg. (mcd)		
											(nm)	
0.80" Single-Digit	VSD-8036A4	VSD-8036C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	1.9	2.5	3.0	SD-67
			GaP/ Green	568	30	80	30	150	2.1	2.5	3.0	
0.80" Alpha-Numeric Displays	VSD-8036A4C	VSD-8036C4C	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	1.9	2.5	3.0	SD-68
			GaP/ Green	568	30	80	30	150	2.1	2.5	3.0	

**SD-67** VSD-80x $\frac{A}{C}$  4

Technical drawing of SD-67 LED display showing dimensions and pin configurations. Dimensions include 11.00(433)mm width, 20.40(800)mm height, and 19.90(783)mm base width. Pin 1 is marked. A schematic diagram shows the internal LED layout with segments A through DP and pins 1 through 7.

**SD-68** VSD-80x $\frac{A}{C}$  4C

Technical drawing of SD-68 LED display showing dimensions and pin configurations. Dimensions include 11.00(433)mm width, 20.32(800)mm height, and 20.20(795)mm base width. Pin 1 is marked. A schematic diagram shows the internal LED layout with segments A1 through DP and pins 1 through 12.

- NOTES: 1.ALL Dimensions are in millimeters(inches).  
 2.Tolerance is±0.25mm(.010")  
 3.Specifications are subject to change without notice.  
 4.NP:No Pin. 5.NC:No Connect



# MULTI-COLOR LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length p(nm)	(nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.80" Single-Digit	VSD-8536A4	VSD-8536C4	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	1.9	2.5	3.0	SD-69
			GaP/ Green	568	30	80	30	150	2.1	2.5	3.0	
1.00" Single-Digit	VSD-10036A4	VSD-10036C4	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	3.8	5.0	5.5	SD-70
			GaP/ Green	568	30	160	30	150	4.2	5.0	5.5	

**SD-69** VSD-85x<sup>A</sup>/<sub>C</sub>4

**SD-70** VSD-100x<sup>A</sup>/<sub>C</sub>4

NOTES: 1.ALL Dimensions are in millimeters(inches).  
 2.Tolerance is±0.25mm(.010")  
 3.Specifications are subject to change without notice.  
 4.NP:No Pin. 5.NC:No Connect



# MULTI-COLOR LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
1.20" Single-Digit	VSD-12036A4	VSD-12036C4	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.5	SD-71
			GaP/ Green	568	30	160	30	150	4.4	5.0	5.5	
1.50" Single-Digit	VSD-15036A4	VSD-15036C4	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.5	SD-72
			GaP/ Green	568	30	160	30	150	4.4	5.0	5.5	

**SD-71** **VSD-120x $\times$  $\frac{A}{C}4$**

Technical drawing and circuit diagrams for SD-71 LED display.

**SD-72** **VSD-150x $\times$  $\frac{A}{C}4$**

Technical drawing and circuit diagrams for SD-72 LED display.

NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is $\pm$ 0.25mm(.010")  
4.NP:No Pin. 5.NC:No Connect



# MULTI-COLOR LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
1.50" Single-Digit	VSD-15436A4	VSD-15436C4	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.5	SD-73
			GaP/ Green	568	30	160	30	150	4.4	5.0	5.5	
1.50" Single-Digit	VSD-15536A4	VSD-15536C4	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	5.5	SD-74
			GaP/ Green	568	30	160	30	150	4.4	5.0	5.5	

**SD-73** **VSD-154x $\times$  $\frac{A}{C}4$**

NP: 1,12.

**SD-74** **VSD-155x $\times$  $\frac{A}{C}4$**

NOTES: 1.ALL Dimensions are in millimeters(inches).  
 3.Specifications are subject to change without notice.

2.Tolerance is $\pm 0.25$ mm(.010")  
 4.NP:No Pin. 5.NC:No Connect

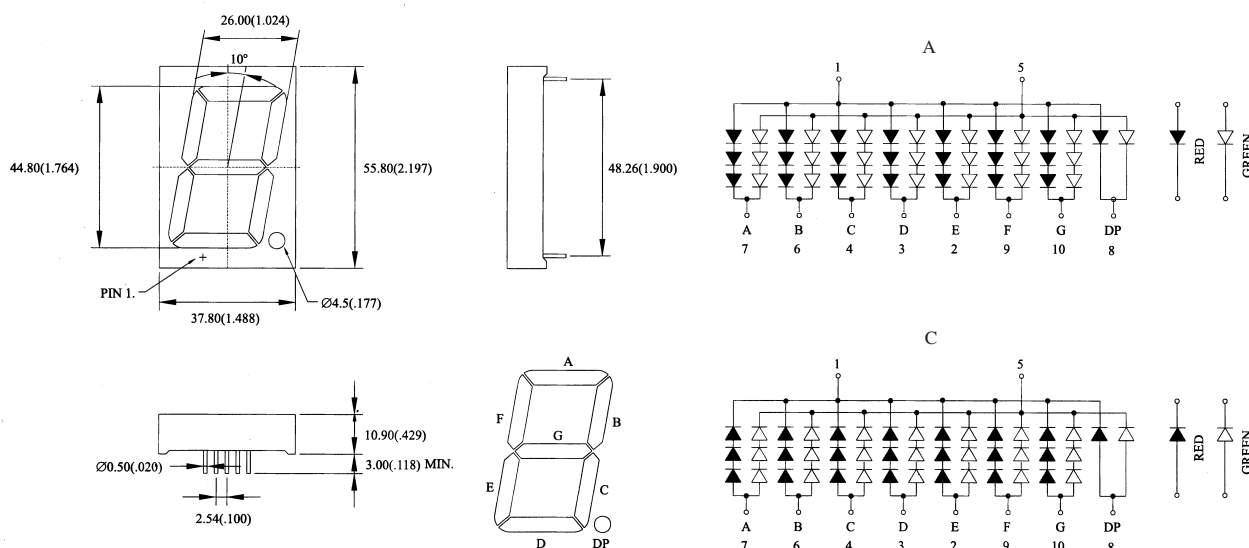


# MULTI-COLOR LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
1.80" Single-Digit	VSD-18036A4	VSD-18036C4	GaAsP/GaP/ Hi-Eff.Red	635	45	230	30	150	6.0	7.5	9.0	SD-75
			GaP/ Green	568	30	230	30	150	6.9	7.5	9.0	
1.80" Overflow	VSD-18036A4F	VSD-18036C4F	GaAsP/GaP/ Hi-Eff.Red	635	45	230	30	150	6.0	7.5	9.0	SD-76
			GaP/ Green	568	30	230	30	150	6.9	7.5	9.0	

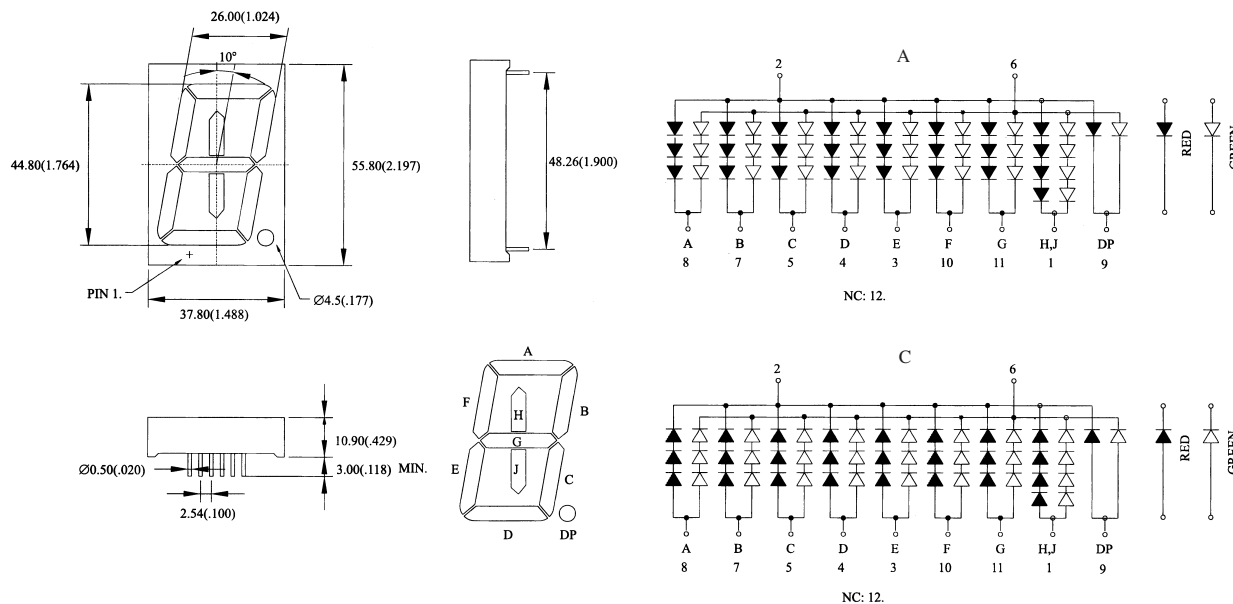
SD-75

VSD-180x $\overset{A}{C}4$



SD-76

VSD-180x $\overset{A}{C}4F$



NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is $\pm 0.25$ mm(.010")  
4.NP:No Pin. 5.NC:No Connect



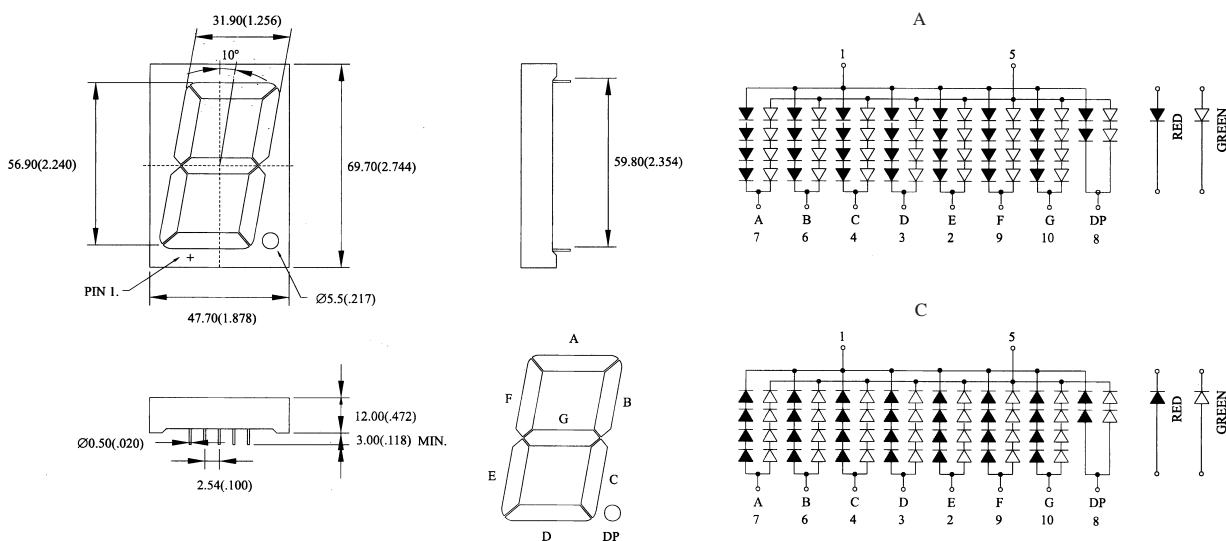


# MULTI-COLOR LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length p(nm)	(nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg.(mcd)	
									Typ.	Max.		
2.30" Single-Digit	VSD-23036A4	VSD-23036C4	GaAsP/GaP/ Hi-Eff.Red	635	45	312	30	150	8.0	10.0	12.0	SD-77
			GaP/ Green	568	30	312	30	150	8.8	10.0	12.0	
3.00" Single-Digit	VSD-30036A4F	VSD-30036C4F	GaAsP/GaP/ Hi-Eff.Red	635	45	312	30	150	8.0	10.0	12.0	SD-78
			GaP/ Green	568	30	312	30	150	8.8	10.0	12.0	

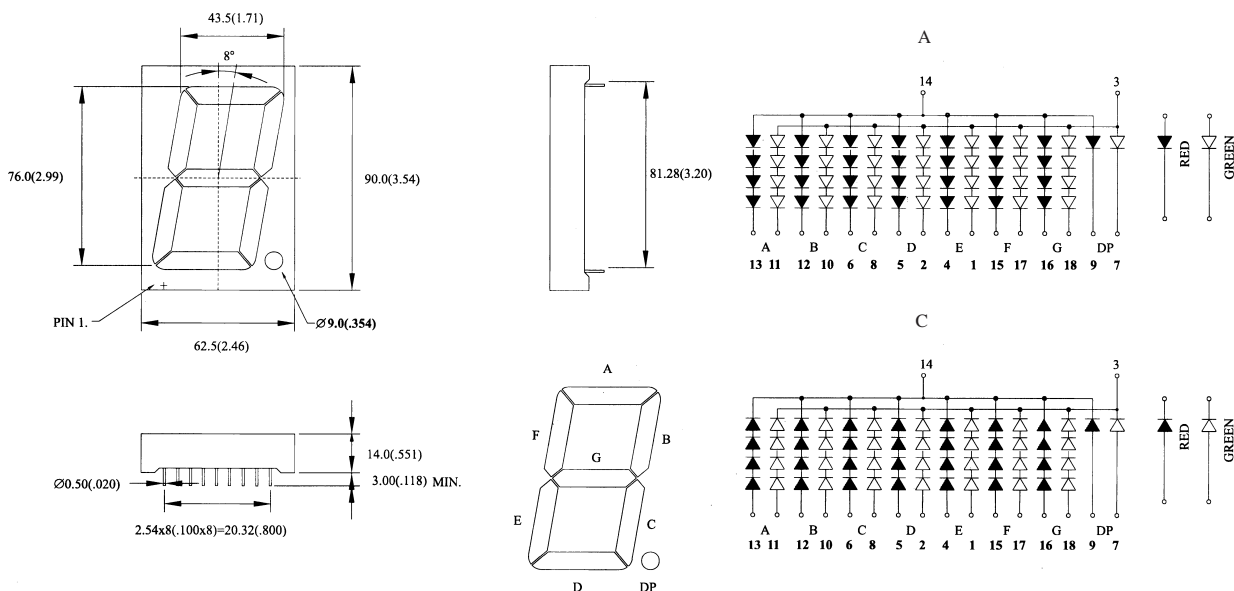
SD-77

VSD-230x $\frac{A}{C}$ 4



SD-78

VSD-300x $\frac{A}{C}$ 4F



NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is±0.25mm(.010")  
4.NP:No Pin. 5.NC:No Connect



# DUAL DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.28" Dual-Digit	VSD-282E42	VSD-282F42	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.0	SD-79
	VSD-282E52	VSD-282F52										
	VSD-286E42	VSD-286F42	GaP/ Green	568	30	80	30	150	2.2	2.5	2.5	
	VSD-285E42	VSD-285F42	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-283E42	VSD-283F42	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	2.5	
	VSD-284E42	VSD-284F42	GaAsP/GaP/ Orange									
	VSD-280E42	VSD-280F42	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	5.0	
VSD-280R1E42	VSD-280R1F42	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	6.0		
0.30" Dual-Digit	VSD-302A42N	VSD-302C42N	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-80
	VSD-302A52N	VSD-302C52N										
	VSD-306A42N	VSD-306C42N	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-305A42N	VSD-305C42N	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-303A42N	VSD-303C42N	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-304A42N	VSD-304C42N	GaAsP/GaP/ Orange									
	VSD-300A42N	VSD-300C42N	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-300R1A42N	VSD-300R1C42N	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.30" Dual-Digit	VSD-312A42N	VSD-312C42N	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-81
	VSD-312A52N	VSD-312C52N										
	VSD-316A42N	VSD-316C42N	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-315A42N	VSD-315C42N	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-313A42N	VSD-313C42N	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-314A42N	VSD-314C42N	GaAsP/GaP/ Orange									
	VSD-310A42N	VSD-310C42N	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-310R1A42N	VSD-310R1C42N	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.30" Dual-Digit	VSD-302E42	VSD-302F42	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-82
	VSD-302E52	VSD-302F52										
	VSD-306E42	VSD-306F42	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-305E42	VSD-305F42	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-303E42	VSD-303F42	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-304E42	VSD-304F42	GaAsP/GaP/ Orange									
	VSD-300E42	VSD-300F42	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-300R1E42	VSD-300R1F42	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.30" Dual-Digit	VSD-302E42-1	VSD-302F42-1	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-83
	VSD-302E52-1	VSD-302F52-1										
	VSD-306E42-1	VSD-306F42-1	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-305E42-1	VSD-305F42-1	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-303E42-1	VSD-303F42-1	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-304E42-1	VSD-304F42-1	GaAsP/GaP/ Orange									
	VSD-300E42-1	VSD-300F42-1	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-300R1E42-1	VSD-300R1F42-1	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.30" Dual-Digit	VSD-302E42-2	VSD-302F42-2	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-84
	VSD-302E52-2	VSD-302F52-2										
	VSD-306E42-2	VSD-306F42-2	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-305E42-2	VSD-305F42-2	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-303E42-2	VSD-303F42-2	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-304E42-2	VSD-304F42-2	GaAsP/GaP/ Orange									
	VSD-300E42-2	VSD-300F42-2	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-300R1E42-2	VSD-300R1F42-2	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		



# DUAL DIGIT LED DISPLAYS

SD-79 VSD-28x $\frac{E}{F}$ 42	SD-80 VSD-30x $\frac{A}{C}$ 42N

NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is  $\pm 0.25\text{mm}(.010\text{'})$   
4.NP:No Pin. 5.NC:No Connect



# DUAL DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.30" Dual-Digit	VSD-312E42N	VSD-312F42N	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.0	SD-85
	VSD-312E52N	VSD-312F52N										
	VSD-316E42N	VSD-316F42N	GaP/ Green	568	30	80	30	150	2.2	2.5	2.5	
	VSD-315E42N	VSD-315F42N	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-313E42N	VSD-313F42N	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	2.5	
	VSD-314E42N	VSD-314F42N	GaAsP/GaP/ Orange									
	VSD-310E42N	VSD-310F42N	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	5.0	
VSD-310R1E42N	VSD-310R1F42N	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	6.0		
0.36" Dual-Digit	VSD-322E42	VSD-322F42	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-86
	VSD-322E52	VSD-322F52										
	VSD-326E42	VSD-326F42	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-325E42	VSD-325F42	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-323E42	VSD-323F42	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-324E42	VSD-324F42	GaAsP/GaP/ Orange									
	VSD-320E42	VSD-320F42	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-320R1E42	VSD-320R1F42	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.39" Dual-Digit	VSD-392A42N	VSD-392C42N	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-87
	VSD-392A52N	VSD-392C52N										
	VSD-396A42N	VSD-396C42N	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-395A42N	VSD-395C42N	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-393A42N	VSD-393C42N	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-394A42N	VSD-394C42N	GaAsP/GaP/ Orange									
	VSD-390A42N	VSD-390C42N	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
VSD-390R1A42N	VSD-390R1C42N	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		
0.40" Dual-Digit	VSD-402A42N	VSD-402C42N	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-88
	VSD-402A52N	VSD-402C52N										
	VSD-406A42N	VSD-406C42N	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-405A42N	VSD-405C42N	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-403A42N	VSD-403C42N	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-404A42N	VSD-404C42N	GaAsP/GaP/ Orange									
	VSD-400A42N	VSD-400C42N	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
VSD-400R1A42N	VSD-400R1C42N	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		
0.40" Dual-Digit	VSD-412A42N	VSD-412C42N	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-89
	VSD-412A52N	VSD-412C52N										
	VSD-416A42N	VSD-416C42N	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-415A42N	VSD-415C42N	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-413A42N	VSD-413C42N	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-414A42N	VSD-414C42N	GaAsP/GaP/ Orange									
	VSD-410A42N	VSD-410C42N	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
	VSD-410R1A42N	VSD-410R1C42N	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5	
	VSD-402E42	VSD-402F42	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-90
	VSD-402E52	VSD-402F52										
	VSD-406E42	VSD-406F42	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-405E42	VSD-405F42	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-403E42	VSD-403F42	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-404E42	VSD-404F42	GaAsP/GaP/ Orange									
VSD-400E42	VSD-400F42	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5		
VSD-400R1E42	VSD-400R1F42	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		



# DUAL DIGIT LED DISPLAYS

SD-85 VSD-31x <sub>E</sub> F 42N	SD-86 VSD-32x <sub>E</sub> F 42

NOTES: 1.ALL Dimensions are in millimeters( inches).  
 3.Specifications are subject to change without notice.

2.Tolerance is±0.25mm(.010")  
 4.NP:No Pin. 5.NC:No Connect





# DUAL DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	I <sub>fp</sub> (mA)	V <sub>f</sub> (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.40" Dual-Digit	VSD-402E42N	VSD-402F42N	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-91
	VSD-402E52N	VSD-402F52N										
	VSD-406E42N	VSD-406F42N	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-405E42N	VSD-405F42N	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-403E42N	VSD-403F42N	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-404E42N	VSD-404F42N	GaAsP/GaP/ Orange									
	VSD-400E42N	VSD-400F42N	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
VSD-400R1E42N	VSD-400R1F42N	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		
0.43" Dual-Digit	VSD-432E42	VSD-432F42	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-92
	VSD-432E52	VSD-432F52										
	VSD-436E42	VSD-436F42	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-435E42	VSD-435F42	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-433E42	VSD-433F42	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-434E42	VSD-434F42	GaAsP/GaP/ Orange									
	VSD-430E42	VSD-430F42	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
VSD-430R1E42	VSD-430R1F42	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		
0.50" Dual-Digit	VSD502A42	VSD-502C42	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-93
	VSD-502A52	VSD-502C52										
	VSD-506A42	VSD-506C42	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-505A42	VSD-505C42	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-503A42	VSD-503C42	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-504A42	VSD-504C42	GaAsP/GaP/ Orange									
	VSD-500A42	VSD-500C42	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
	VSD-500R1A42	VSD-500R1C42	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5	
	VSD502A42-1	VSD-502C42-1	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-94
	VSD-502A52-1	VSD-502C52-1										
	VSD-506A42-1	VSD-506C42-1	GaP/ Green	568	30	80	30	150	2.2	2.5	3.8	
	VSD-505A42-1	VSD-505C42-1	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.8	
	VSD-503A42-1	VSD-503C42-1	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.6	
	VSD-504A42-1	VSD-504C42-1	GaAsP/GaP/ Orange									
VSD-500A42-1	VSD-500C42-1	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.8		
VSD-500R1A42-1	VSD-500R1C42-1	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.8		
VSD502E42	VSD-502F42	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-95	
VSD-502E52	VSD-502F52											
VSD-506E42	VSD-506F42	GaP/ Green	568	30	80	30	150	2.2	2.5	3.8		
VSD-505E42	VSD-505F42	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.8		
VSD-503E42	VSD-503F42	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.6		
VSD-504E42	VSD-504F42	GaAsP/GaP/ Orange										
VSD-500E42	VSD-500F42	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.8		
VSD-500R1E42	VSD-500R1F42	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.8		
VSD502E42-1	VSD-502F42-1	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-96	
VSD-502E52-1	VSD-502F52-1											
VSD-506E42-1	VSD-506F42-1	GaP/ Green	568	30	80	30	150	2.2	2.5	3.8		
VSD-505E42-1	VSD-505F42-1	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.8		
VSD-503E42-1	VSD-503F42-1	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.6		
VSD-504E42-1	VSD-504F42-1	GaAsP/GaP/ Orange										
VSD-500E42-1	VSD-500F42-1	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.8		
VSD-500R1E42-1	VSD-500R1F42-1	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.8		



# DUAL DIGIT LED DISPLAYS

SD-91 VSD-40x $\frac{E}{F}$ 42N	SD-92 VSD-43x $\frac{E}{F}$ 42
SD-93 VSD-50x $\frac{A}{C}$ 42	SD-94 VSD-50x $\frac{A}{C}$ 42-1
SD-95 VSD-50x $\frac{E}{F}$ 42	SD-96 VSD-50x $\frac{E}{F}$ 42-1

NOTES: 1.ALL Dimensions are in millimeters(inches).  
 3.Specifications are subject to change without notice.

2.Tolerance is  $\pm 0.25\text{mm}(0.010\text{'})$   
 4.NP:No Pin. 5.NC:No Connect



# DUAL DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length p(nm)	(nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.52" Dual-Digit	VSD522A42	VSD522C42	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-97
	VSD-522A52	VSD-522C52										
	VSD-526A42	VSD-526C42	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-525A42	VSD-525C42	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-523A42	VSD-523C42	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-524A42	VSD-524C42	GaAsP/GaP/ Orange									
	VSD-520A42	VSD-520C42	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
VSD-520R1A42	VSD-520R1C42	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		
0.54" Alpha-Numeric Displays	VSD-542E42C	VSD-542F42C	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-98
	VSD542E52C	VSD542F52C										
	VSD546E42C	VSD546F42C	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD545E42C	VSD545F42C	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD543E42C	VSD543F42C	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD544E42C	VSD544F42C	GaAsP/GaP/ Orange									
	VSD540E42C	VSD540F42C	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
VSD540R1E42C	VSD540R1F42C	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		
0.56" Dual-Digit	VSD-562A42	VSD-562C42	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-99
	VSD-562A52	VSD-562C52										
	VSD-566A42	VSD-566C42	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-565A42	VSD-565C42	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-563A42	VSD-563C42	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-564A42	VSD-564C42	GaAsP/GaP/ Orange									
	VSD-560A42	VSD-560C42	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
VSD-560R1A42	VSD-560R1C42	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		
0.56" Dual-Digit	VSD-572A42	VSD-572C42	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-100
	VSD-572A52	VSD-572C52										
	VSD-576A42	VSD-576C42	GaP/ Green	568	30	80	30	150	2.2	2.5	3.8	
	VSD-575A42	VSD-575C42	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.8	
	VSD-573A42	VSD-573C42	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.6	
	VSD-574A42	VSD-574C42	GaAsP/GaP/ Orange									
	VSD-570A42	VSD-570C42	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.8	
VSD-570R1A42	VSD-570R1C42	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.8		
0.56" Dual-Digit	VSD-582A42	VSD-582C42	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-101
	VSD-582A52	VSD-582C52										
	VSD-586A42	VSD-586C42	GaP/ Green	568	30	80	30	150	2.2	2.5	3.8	
	VSD-585A42	VSD-585C42	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.8	
	VSD-583A42	VSD-583C42	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.6	
	VSD-584A42	VSD-584C42	GaAsP/GaP/ Orange									
	VSD-580A42	VSD-580C42	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.8	
VSD-580R1A42	VSD-580R1C42	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.8		
0.56" Dual-Digit	VSD-562E42	VSD-562F42	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-102
	VSD-562E52	VSD-562F52										
	VSD-566E42	VSD-566F42	GaP/ Green	568	30	80	30	150	2.2	2.5	3.8	
	VSD-565E42	VSD-565F42	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.8	
	VSD-563E42	VSD-563F42	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.6	
	VSD-564E42	VSD-564F42	GaAsP/GaP/ Orange									
	VSD-560E42	VSD-560F42	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.8	
VSD-560R1E42	VSD-560R1F42	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.8		



# DUAL DIGIT LED DISPLAYS

SD-97 VSD-52x $\frac{A}{C}$ 42	SD-98 VSD-54x $\frac{E}{F}$ 42C

NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is±0.25mm(.010")  
4.NP:No Pin. 5.NC:No Connect





# DUAL DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda$ p(nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.56 Dual-Digit	VSD-572E42	VSD-572F42	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-103
	VSD-572E52	VSD-572F52										
	VSD-576E42	VSD-576F42	GaP/ Green	568	30	80	30	150	2.2	2.5	3.8	
	VSD-575E42	VSD-575F42	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.8	
	VSD-573E42	VSD-573F42	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.6	
	VSD-574E42	VSD-574F42	GaAsP/GaP/ Orange									
	VSD-570E42	VSD-570F42	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.8	
VSD-570R1E42	VSD-570R1F42	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.8		
0.80" Dual-Digit	VSD-802A42	VSD-802C42	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-104
	VSD-802A52	VSD-802C52										
	VSD-806A42	VSD-806C42	GaP/ Green	568	30	80	30	150	2.2	2.5	4.0	
	VSD-805A42	VSD-805C42	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	3.0	
	VSD-803A42	VSD-803C42	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	4.0	
	VSD-804A42	VSD-804C42	GaAsP/GaP/ Orange									
	VSD-800A42	VSD-800C42	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.0	
	VSD-800R1A42	VSD-800R1C42	GaAlAs/ DDH Super Red	660	20	80	30	150	2.0	2.5	12.0	
	VSD-802E42	VSD-802F42	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-105
	VSD-802E52	VSD-802F52										
	VSD-806E42	VSD-806F42	GaP/ Green	568	30	80	30	150	2.2	2.5	4.0	
	VSD-805E42	VSD-805F42	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	3.0	
	VSD-803E42	VSD-803F42	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	4.0	
	VSD-804E42	VSD-804F42	GaAsP/GaP/ Orange									
VSD-800E42	VSD-800F42	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.0		
VSD-800R1E42	VSD-800R1F42	GaAlAs/ DDH Super Red	660	20	80	30	150	2.0	2.5	12.0		
VSD-812E42	VSD-812F42	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-106	
VSD-812E52	VSD-812F52											
VSD-816E42	VSD-816F42	GaP/ Green	568	30	80	30	150	2.2	2.5	4.0		
VSD-815E42	VSD-815F42	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	3.0		
VSD-813E42	VSD-813F42	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	4.0		
VSD-814E42	VSD-814F42	GaAsP/GaP/ Orange										
VSD-810E42	VSD-810F42	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.0		
VSD-810R1E42	VSD-810R1F42	GaAlAs/ DDH Super Red	660	20	80	30	150	1.7	2.5	12.0		
VSD-822A42	VSD-822C42	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-107	
VSD-822A52	VSD-822C52											
VSD-826A42	VSD-826C42	GaP/ Green	568	30	80	30	150	2.2	2.5	4.0		
VSD-825A42	VSD-825C42	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	3.0		
VSD-823A42	VSD-823C42	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	4.0		
VSD-824A42	VSD-824C42	GaAsP/GaP/ Orange										
VSD-820A42	VSD-820C42	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.0		
VSD-820R1A42	VSD-820R1C42	GaAlAs/ DDH Super Red	660	20	80	30	150	2.0	2.5	12.0		
VSD-832E42	VSD-832F42	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-108	
VSD-832E52	VSD-832F52											
VSD-836E42	VSD-836F42	GaP/ Green	568	30	80	30	150	2.2	2.5	4.0		
VSD-835E42	VSD-835F42	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	3.0		
VSD-833E42	VSD-833F42	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	4.0		
VSD-834E42	VSD-834F42	GaAsP/GaP/ Orange										
VSD-830E42	VSD-830F42	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.0		
VSD-830R1E42	VSD-830R1F42	GaAlAs/ DDH Super Red	660	20	80	30	150	2.0	2.5	12.0		





# DUAL DIGIT LED DISPLAYS

<p><b>SD-103</b>      <b>VSD-57x<sub>F</sub><sup>E</sup> 42</b></p>	<p><b>SD-104</b>      <b>VSD-80x<sub>C</sub><sup>A</sup> 42</b></p>
<p><b>SD-105</b>      <b>VSD-80x<sub>F</sub><sup>E</sup> 42</b></p>	<p><b>SD-106</b>      <b>VSD-81x<sub>F</sub><sup>E</sup> 42</b></p>
<p><b>SD-107</b>      <b>VSD-82x<sub>C</sub><sup>A</sup> 42</b></p>	<p><b>SD-108</b>      <b>VSD-83x<sub>F</sub><sup>E</sup> 42</b></p>

NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is  $\pm 0.25\text{mm}(0.010\text{'})$   
4.NP:No Pin.    5.NC:No Connect

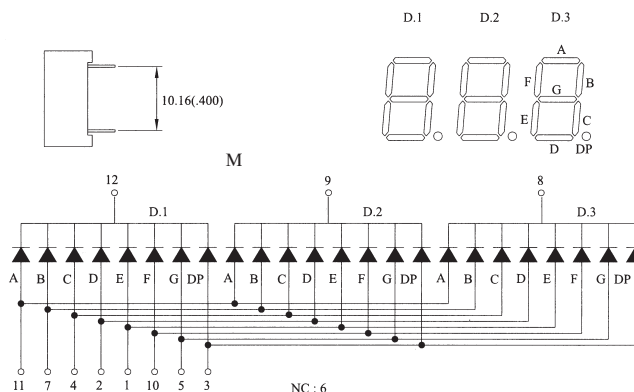
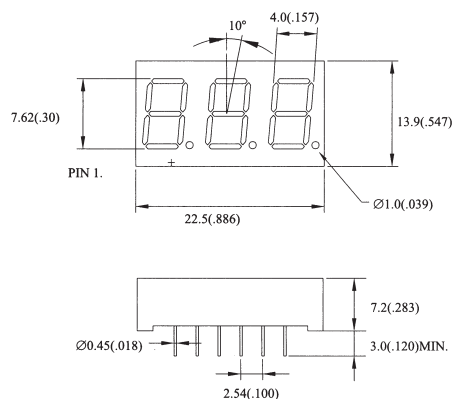


# THREE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.30" Three-Digit	VSD-302M43	VSD-302N43	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-109
	VSD-302M53	VSD-302N53										
	VSD-306M43	VSD-306N43	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-305M43	VSD-305N43	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-303M43	VSD-303N43	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-304M43	VSD-304N43	GaAsP/GaP/ Orange									
	VSD-300M43	VSD-300N43	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-300R1M43	VSD-300R1N43	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.36" Three-Digit	VSD-362M43	VSD-362N43	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-110
	VSD-362M53	VSD-362N53										
	VSD-366M43	VSD-366N43	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-365M43	VSD-365N43	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-363M43	VSD-363N43	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-364M43	VSD-364N43	GaAsP/GaP/ Orange									
	VSD-360M43	VSD-360N43	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-360R1M43	VSD-360R1N43	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		

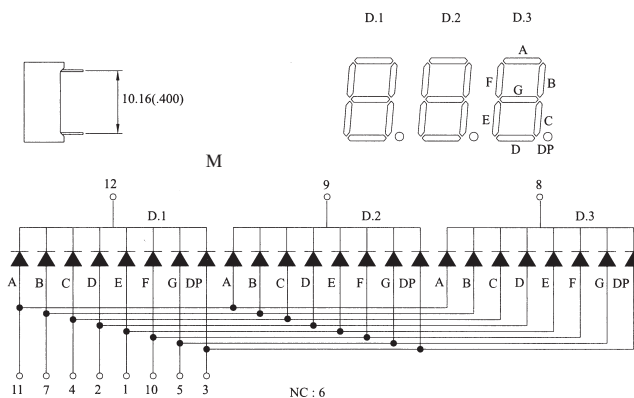
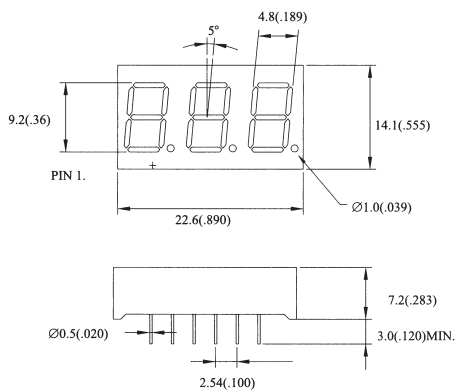
SD-109

VSD-30x<sup>M</sup><sub>N</sub>43



SD-110

VSD-36x<sup>M</sup><sub>N</sub>43



NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is±0.25mm(.010")  
4.NP:No Pin. 5.NC:No Connect

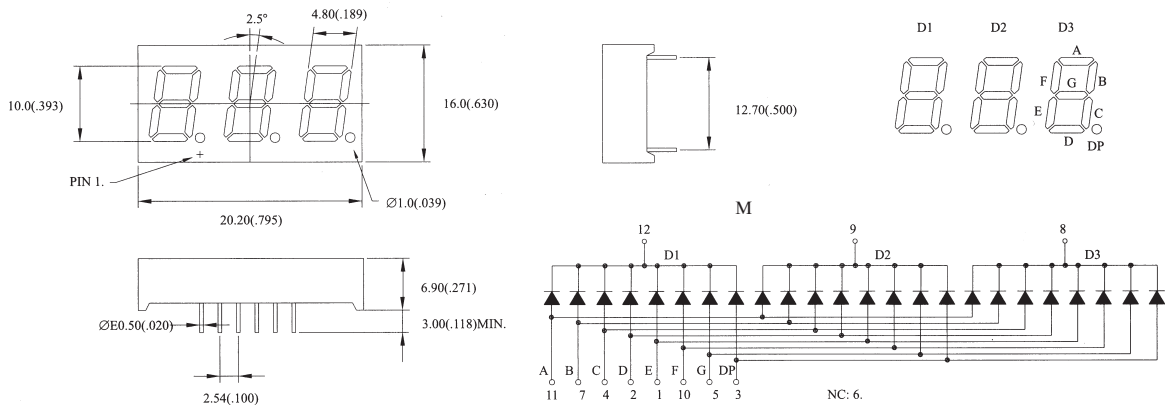


# THREE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.39" Three-Digit	VSD-392M43	VSD-392N43	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-111
	VSD-392M53	VSD-392N53										
	VSD-396M43	VSD-396N43	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-395M43	VSD-395N43	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-393M43	VSD-393N43	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-394M43	VSD-394N43										
	VSD-390M43	VSD-390N43	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-390R1M43	VSD-390R1N43	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.40" Three-Digit	VSD-402M43	VSD-402N43	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-112
	VSD-402M53	VSD-402N53										
	VSD-406M43	VSD-406N43	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-405M43	VSD-405N43	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-403M43	VSD-403N43	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-404M43	VSD-404N43										
	VSD-400M43	VSD-400N43	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-400R1M43	VSD-400R1N43	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		

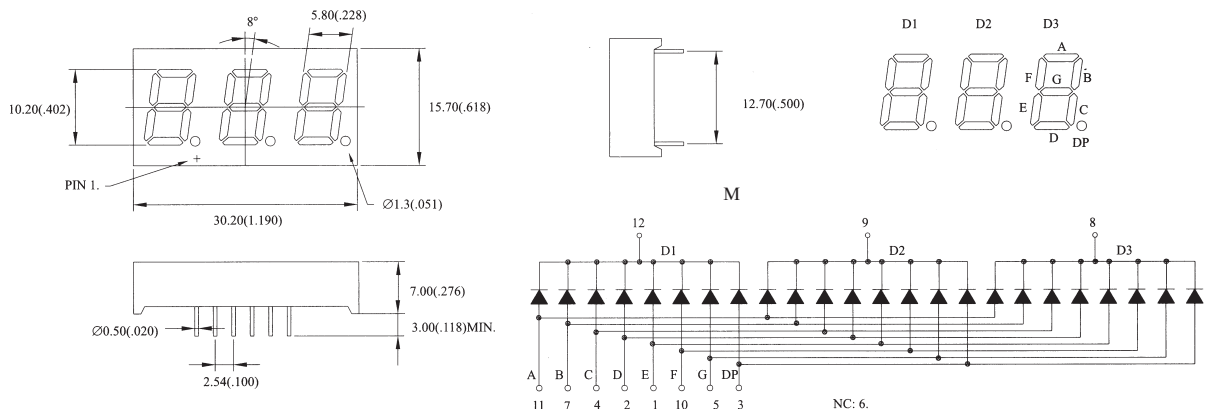
SD-111

VSD-39x<sup>M</sup><sub>N</sub>43



SD-112

VSD-40x<sup>M</sup><sub>N</sub>43



NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is  $\pm 0.25\text{mm}(.010")$   
4.NP:No Pin. 5.NC:No Connect

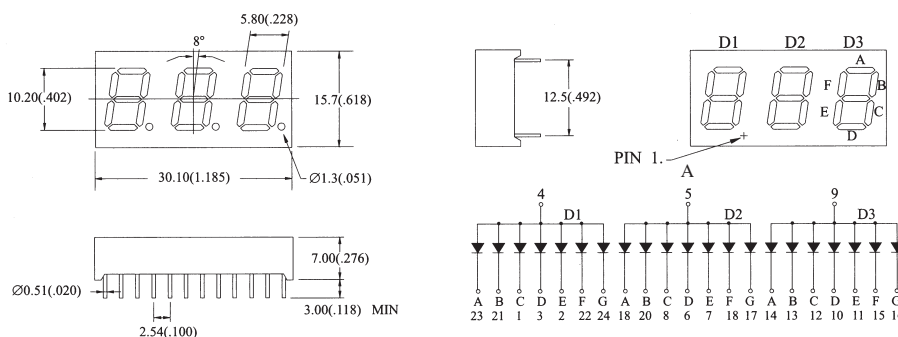


# THREE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.	
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)		
									Typ.	Max.			
0.40" Three-Digit	VSD-402A43N	VSD-402C43N	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-113	
	VSD-402A53N	VSD-402C53N											
	VSD-406A43N	VSD-406C43N	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0		
	VSD-405A43N	VSD-405C43N	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0		
	VSD-403A43N	VSD-403C43N	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0		
	VSD-404A43N	VSD-404C43N	GaAsP/GaP/ Orange										
	VSD-400A43N	VSD-400C43N	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0		
	VSD-400R1A43N	VSD-400R1C43N	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
	VSD-412A43N	VSD-412C43N	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2		SD-114
	VSD-412A53N	VSD-412C53N											
	VSD-416A43N	VSD-416C43N	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0		
	VSD-415A43N	VSD-415C43N	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0		
	VSD-413A43N	VSD-413C43N	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0		
	VSD-414A43N	VSD-414C43N	GaAsP/GaP/ Orange										
VSD-410A43N	VSD-410C43N	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0			
VSD-410R1A43N	VSD-410R1C43N	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0			

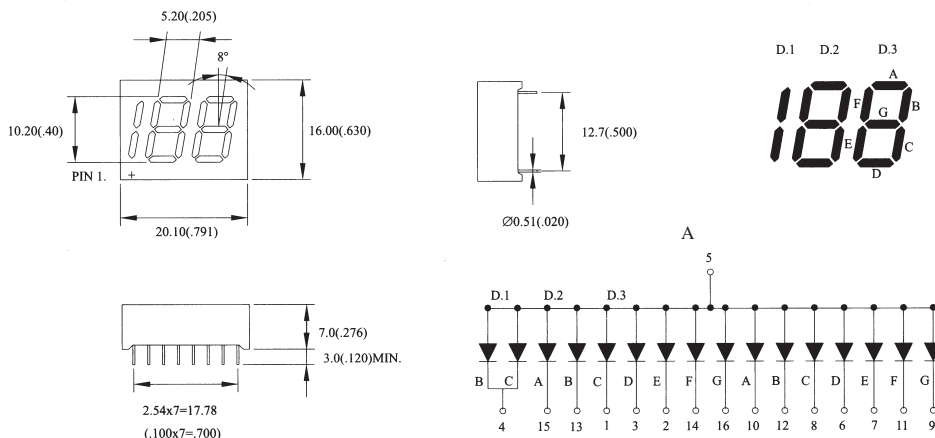
SD-113

VSD-40x<sup>A</sup><sub>C</sub>43N



SD-114

VSD-41x<sup>A</sup><sub>C</sub>43N



NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is±0.25mm(.010")  
4.NP:No Pin. 5.NC:No Connect

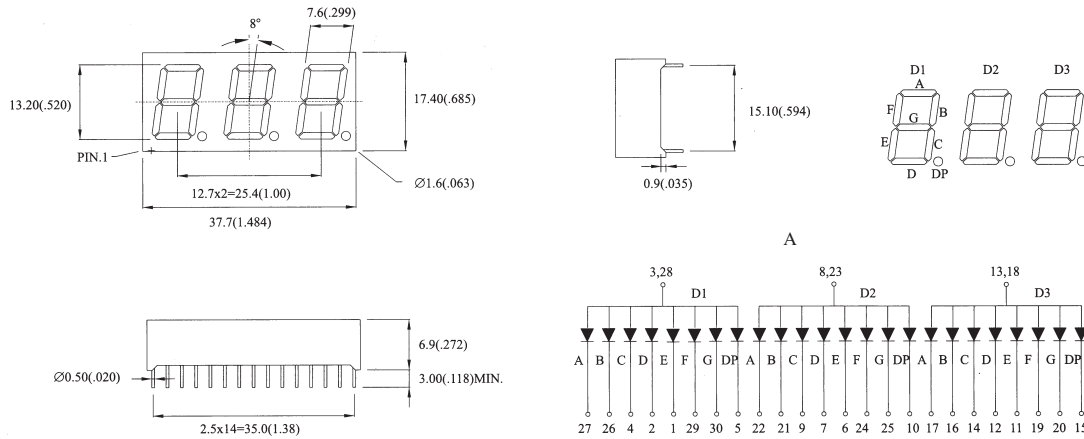


# THREE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.52" Three-Digit	VSD-522A43	VSD-522C43	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-115
	VSD-522A53	VSD-522C53										
	VSD-526A43	VSD-526C43	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-525A43	VSD-525C43	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-523A43	VSD-523C43	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-524A43	VSD-524C43	GaAsP/GaP/ Orange									
	VSD-520A43	VSD-520C43	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.0	
VSD-520R1A43	VSD-520R1C43	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	8.0		
0.56" Three-Digit	VSD-552A43	VSD-552C43	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-116
	VSD-552A53	VSD-552C53										
	VSD-556A43	VSD-556C43	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-555A43	VSD-555C43	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-553A43	VSD-553C43	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-554A43	VSD-554C43	GaAsP/GaP/ Orange									
	VSD-550A43	VSD-550C43	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-550R1A43	VSD-550R1C43	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		

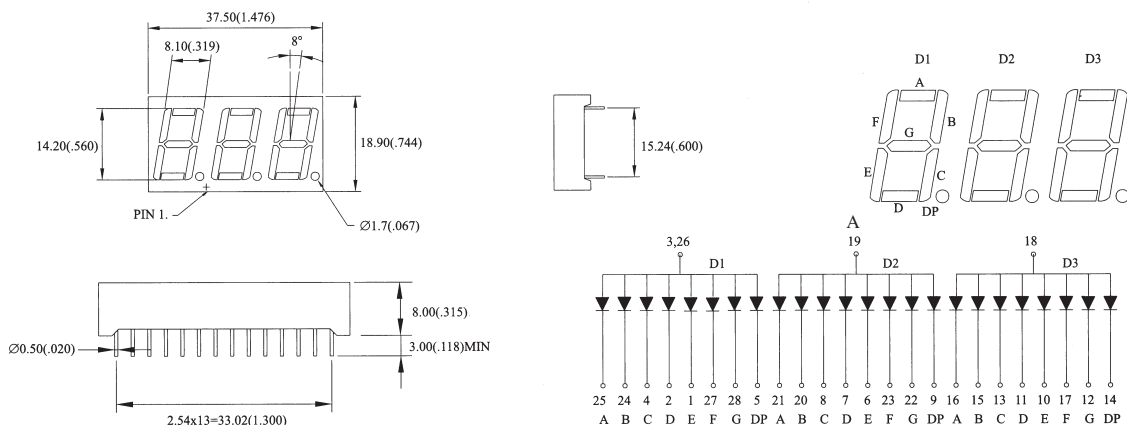
SD-115

VSD-52x<sub>C</sub><sup>A</sup> 43



SD-116

VSD-55x<sub>C</sub><sup>A</sup> 43



NOTES: 1.ALL Dimensions are in millimeters( inches).  
3.Specifications are subject to change without notice.

2.Tolerance is  $\pm 0.25\text{mm}(.010\text{'})$   
4.NP: No Pin. 5.NC: No Connect



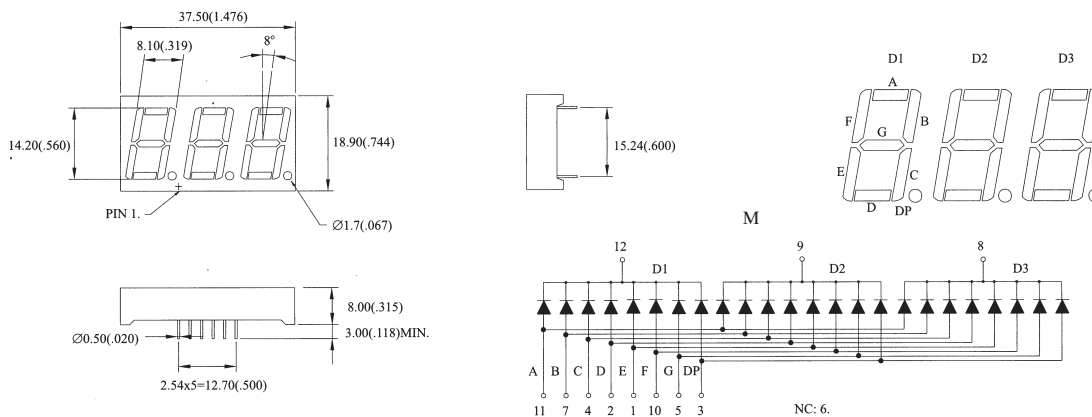


# THREE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.	
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)		
									Typ.	Max.			
0.56" Three-Digit	VSD-562M43	VSD-562N43	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-117	
	VSD-562M53	VSD-562N53											
	VSD-566M43	VSD-566N43	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0		
	VSD-565M43	VSD-565N43	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0		
	VSD-563M43	VSD-563N43	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0		
	VSD-564M43	VSD-564N43	GaAsP/GaP/ Orange										
	VSD-560M43	VSD-560N43	GaAlAs/ SH Super Red										
	VSD-560R1M43	VSD-560R1N43	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
	VSD-562A43	VSD-562C43	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2		SD-118
	VSD-562A53	VSD-562C53											
	VSD-566A43	VSD-566C43	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0		
	VSD-565A43	VSD-565C43	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0		
	VSD-563A43	VSD-563C43	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0		
	VSD-564A43	VSD-564C43	GaAsP/GaP/ Orange										
VSD-560A43	VSD-560C43	GaAlAs/ SH Super Red											
VSD-560R1A43	VSD-560R1C43	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0			

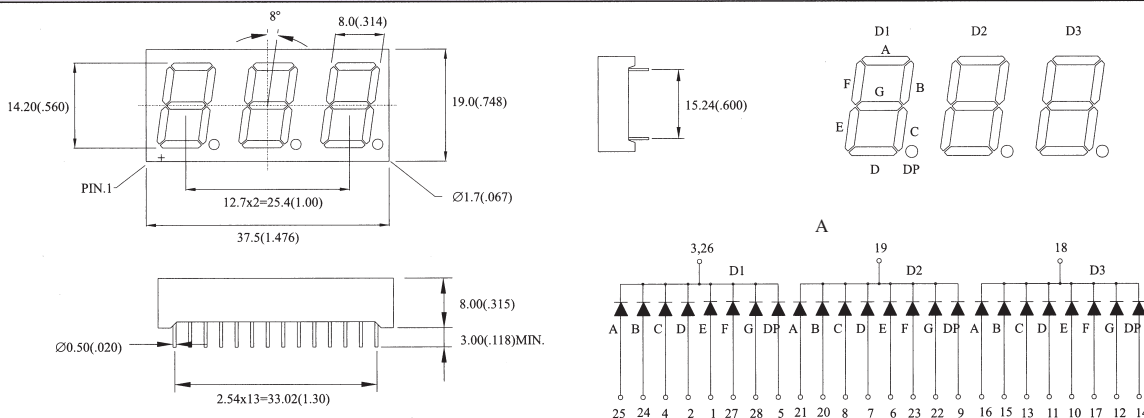
SD-117

VSD-56x<sup>M</sup><sub>N</sub>43



SD-118

VSD-56x<sup>A</sup><sub>C</sub>43



NOTES: 1.ALL Dimensions are in millimeters( inches).  
3.Specifications are subject to change without notice.

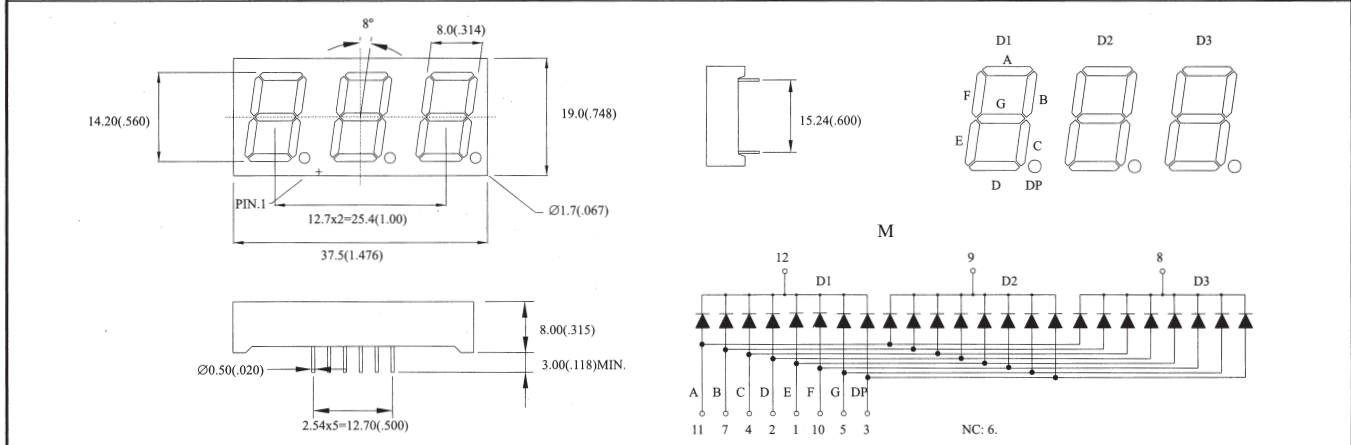
2.Tolerance is±0.25mm(.010")  
4.NP:No Pin. 5.NC:No Connect



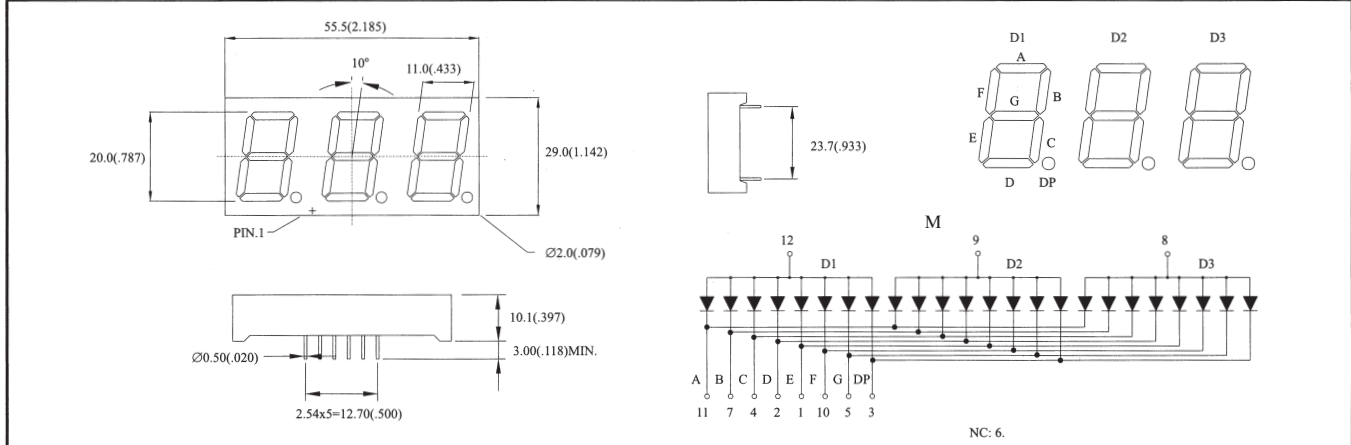
# THREE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.56" Three-Digit	VSD-552M43	VSD-552N43	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-120
	VSD-552M53	VSD-552N53										
	VSD-556M43	VSD-556N43	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-555M43	VSD-555N43	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-553M43	VSD-553N43	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-554M43	VSD-554N43										
	VSD-550M43	VSD-550N43	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-550R1M43	VSD-550R1N43	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.80" Three-Digit	VSD-802M43	VSD-802N43	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.6	SD-121
	VSD-802M53	VSD-802N53										
	VSD-806M43	VSD-806N43	GaP/ Green	568	30	80	30	150	2.2	2.5	3.2	
	VSD-805M43	VSD-805N43	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.2	
	VSD-803M43	VSD-803N43	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.2	
	VSD-804M43	VSD-804N43										
	VSD-800M43	VSD-800N43	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.5	
VSD-800R1M43	VSD-800R1N43	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	12.5		

**SD-120** **VSD-55x<sup>M</sup><sub>N</sub>43**



**SD-121** **VSD-80x<sup>M</sup><sub>N</sub>43**



NOTES: 1.ALL Dimensions are in millimeters(inches).  
 3.Specifications are subject to change without notice.

2.Tolerance is  $\pm 0.25\text{mm}(.010\text{'})$   
 4.NP:No Pin. 5.NC:No Connect

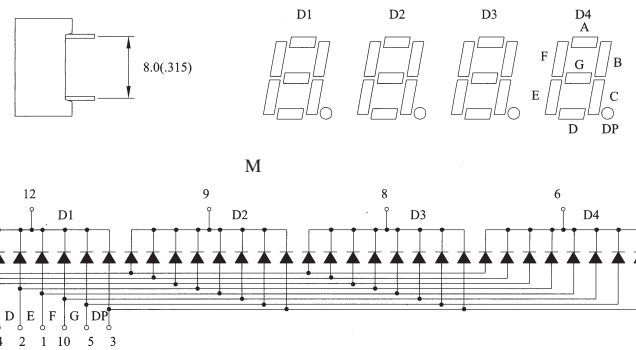
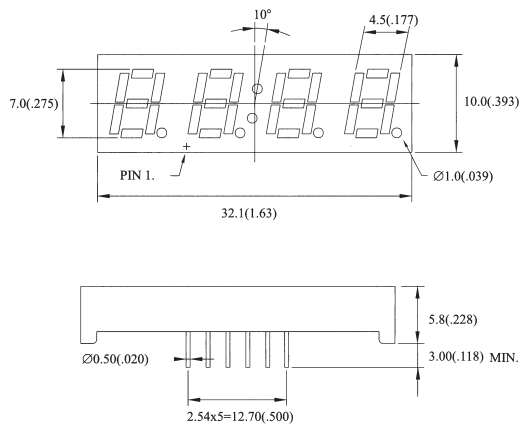


# FOUR DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.28" Four-Digit	VSD-282M44	VSD-282N44	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.0	SD-122
	VSD-282M54	VSD-282N54										
	VSD-286M44	VSD-286N44	GaP/ Green	568	30	80	30	150	2.2	2.5	2.5	
	VSD-285M44	VSD-285N44	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-283M44	VSD-283N44										
	VSD-284M44	VSD-284N44	GaAsP/GaP/ Orange	635	45	80	30	150	2.0	2.5	2.5	
	VSD-280M44	VSD-280N44	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	4.5	
VSD-280R1M44	VSD-280R1N44	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	5.5		
0.30" Four-Digit	VSD-302M44	VSD-302N44	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-123
	VSD-302M54	VSD-302N54										
	VSD-306M44	VSD-306N44	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-305M44	VSD-305N44	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-303M44	VSD-303N44										
	VSD-304M44	VSD-304N44	GaAsP/GaP/ Orange	635	45	80	30	150	2.0	2.5	3.0	
	VSD-300M44	VSD-300N44	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-300R1M44	VSD-300R1N44	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		

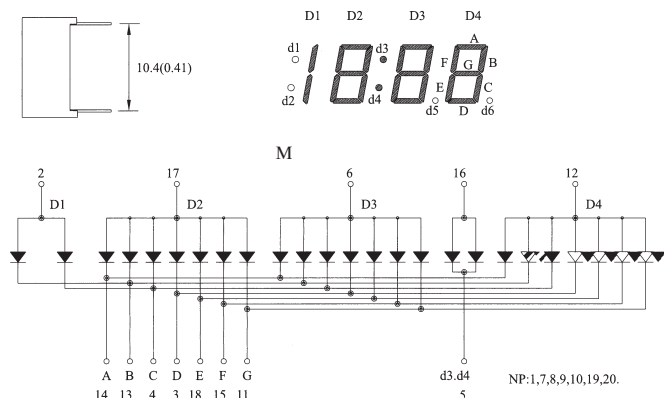
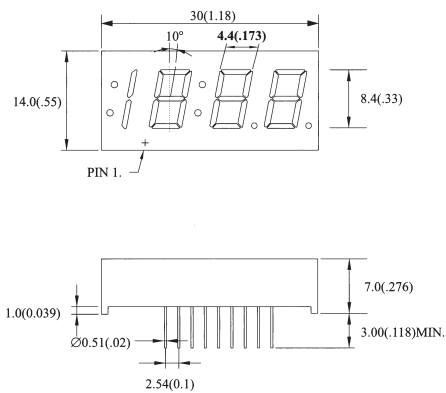
SD-122

VSD-28x<sup>M</sup><sub>N</sub>44



SD-123

VSD-30x<sup>M</sup><sub>N</sub>44



NOTES: 1.ALL Dimensions are in millimeters(inches).  
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2.Tolerance is±0.25mm(.010")  
4.NP:No Pin. 5.NC:No Connect

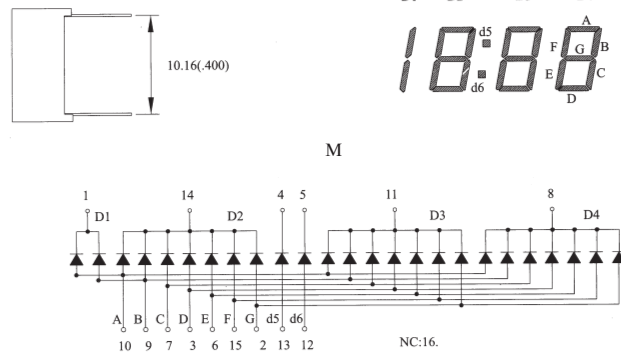
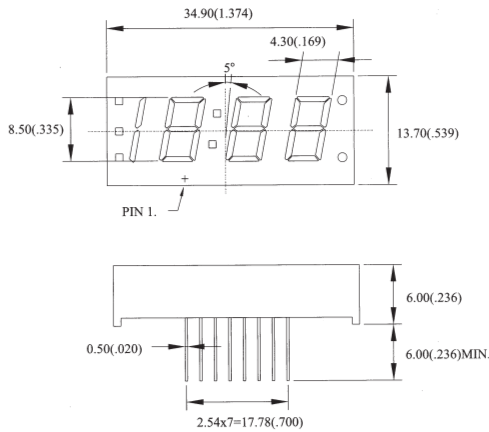


# FOUR DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.31" Four-Digit	VSD-312M44	VSD-312N44	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-124
	VSD-312M54	VSD-312N54										
	VSD-316M44	VSD-316N44	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-315M44	VSD-315N44	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-313M44	VSD-313N44	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-314M44	VSD-314N44										
	VSD-310M44	VSD-310N44	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-310R1M44	VSD-310R1N44	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.33" Four-Digit	VSD-332M44	VSD-332N44	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-125
	VSD-332M54	VSD-332N54										
	VSD-336M44	VSD-336N44	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-335M44	VSD-335N44	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-333M44	VSD-333N44	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-334M44	VSD-334N44										
	VSD-330M44	VSD-330N44	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-330R1M44	VSD-330R1N44	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		

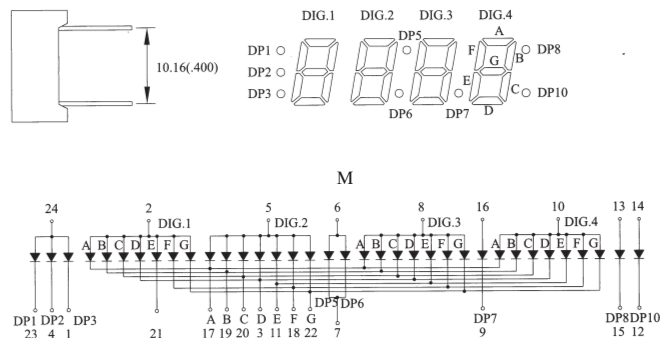
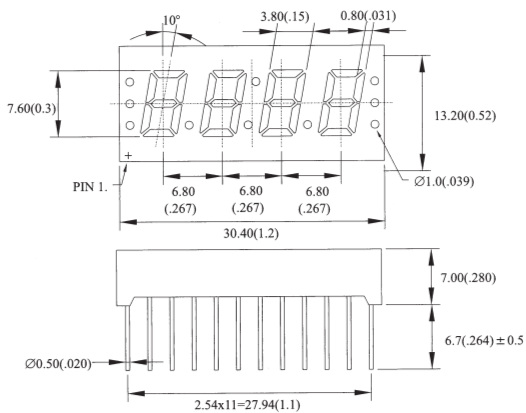
SD-124

VSD-31x<sup>M</sup><sub>N</sub>44



SD-125

VSD-33x<sup>M</sup><sub>N</sub>44



NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is $\pm 0.25$ mm(.010")  
4.NP:No Pin. 5.NC:No Connect

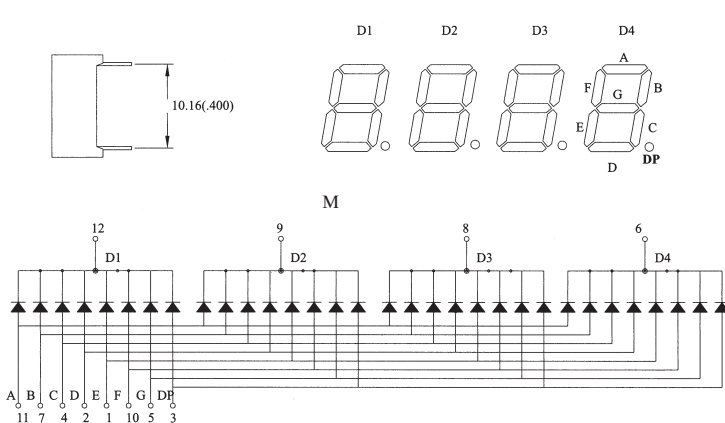
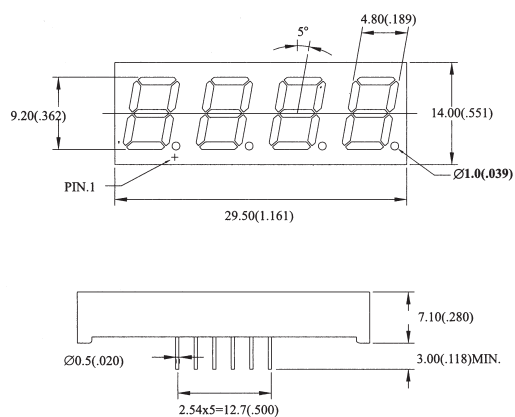


# FOUR DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.36" Four-Digit	VSD-362M44	VSD-362N44	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-126
	VSD-362M54	VSD-362N54										
	VSD-366M44	VSD-366N44	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-365M44	VSD-365N44	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-363M44	VSD-363N44	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-364M44	VSD-364N44	GaAsP/GaP/ Orange									
	VSD-360M44	VSD-360N44	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-360R1M44	VSD-360R1N44	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.40" Four-Digit	VSD-402M44	VSD-402N44	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-127
	VSD-402M54	VSD-402N54										
	VSD-406M44	VSD-406N44	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-405M44	VSD-405N44	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-403M44	VSD-403N44	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-404M44	VSD-404N44	GaAsP/GaP/ Orange									
	VSD-400M44	VSD-400N44	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-400R1M44	VSD-400R1N44	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		

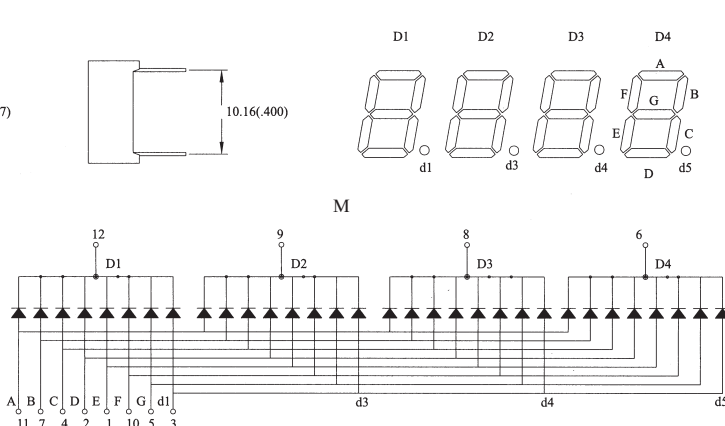
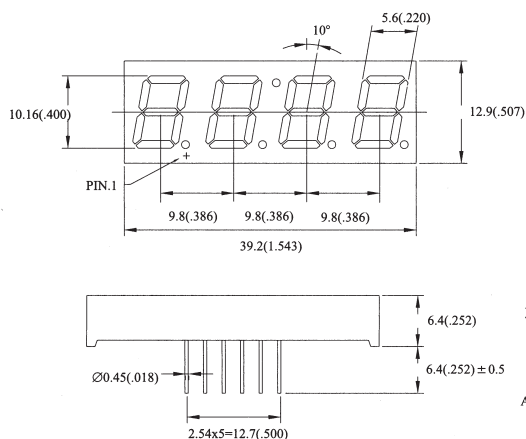
SD-126

VSD-36x<sup>M</sup><sub>N</sub>44



SD-127

VSD-40x<sup>M</sup><sub>N</sub>44



NOTES: 1.ALL Dimensions are in millimeters(inches).  
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2.Tolerance is±0.25mm(.010")  
4.NP:No Pin. 5.NC:No Connect



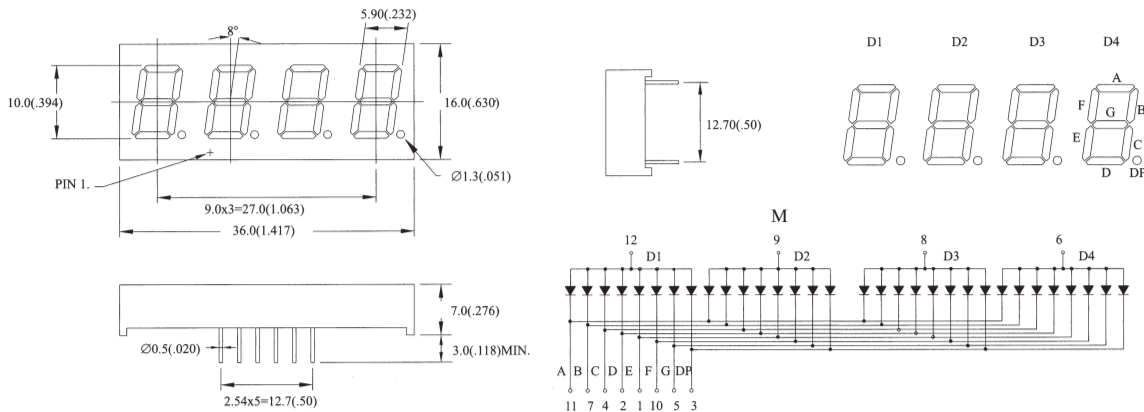


# FOUR DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.40" Four-Digit	VSD-422M44	VSD-422N44	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-128
	VSD-422M54	VSD-422N54										
	VSD-426M44	VSD-426N44	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-425M44	VSD-425N44	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-423M44	VSD-423N44	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-424M44	VSD-424N44	GaAsP/GaP/ Orange									
	VSD-420M44	VSD-420N44	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-420R1M44	VSD-420R1N44	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
0.52" Four-Digit	VSD-522M44	VSD-522N44	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-129
	VSD-522M54	VSD-522N54										
	VSD-526M44	VSD-526N44	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-525M44	VSD-525N44	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-523M44	VSD-523N44	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-524M44	VSD-524N44	GaAsP/GaP/ Orange									
	VSD-520M44	VSD-520N44	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
VSD-520R1M44	VSD-520R1N44	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5		

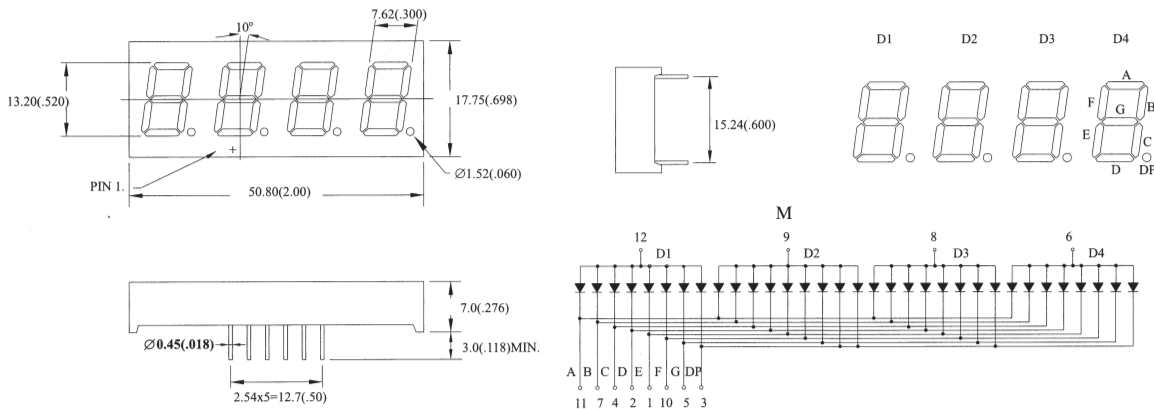
SD-128

VSD-42x<sup>M</sup>/<sub>N</sub>44



SD-129

VSD-52x<sup>M</sup>/<sub>N</sub>44



NOTES: 1.ALL Dimensions are in millimeters(inches).  
 2.Tolerance is±0.25mm(.010")  
 3.Specifications are subject to change without notice.

4.NP:No Pin. 5.NC:No Connect

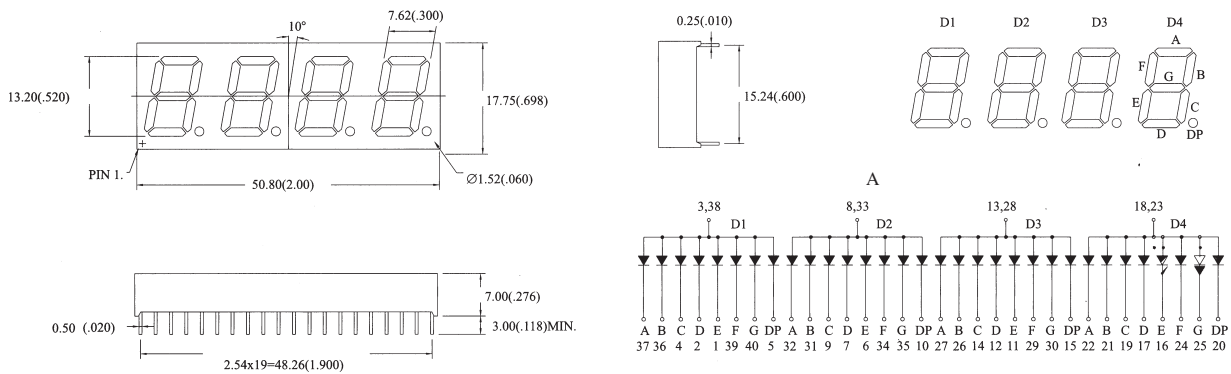


# FOUR DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.52" Four-Digit	VSD-522A44	VSD-522C44	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-130
	VSD-522A54	VSD-522C54										
	VSD-526A44	VSD-526C44	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-525A44	VSD-525C44	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-523A44	VSD-523C44	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-524A44	VSD-524C44	GaAsP/GaP/ Orange									
	VSD-520A44	VSD-520C44	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
	VSD-520R1A44	VSD-520R1C44	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5	
0.56" Four-Digit	VSD-562M44	VSD-562N44	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	SD-131
	VSD-562M54	VSD-562N54										
	VSD-566M44	VSD-566N44	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-565M44	VSD-565N44	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-563M44	VSD-563N44	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-564M44	VSD-564N44	GaAsP/GaP/ Orange									
	VSD-560M44	VSD-560N44	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
	VSD-560R1M44	VSD-560R1N44	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5	

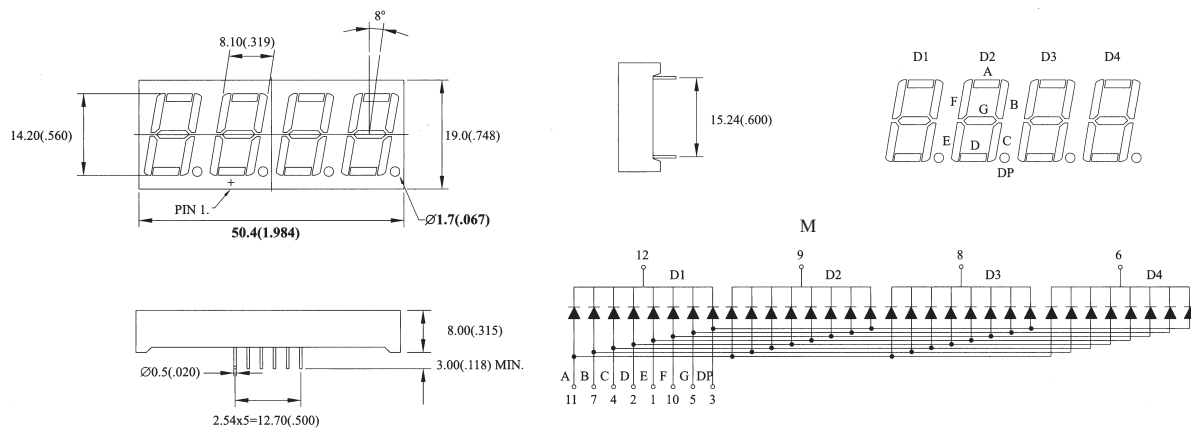
SD-130

VSD-52x<sup>A</sup>C44



SD-131

VSD-56x<sup>M</sup>N44



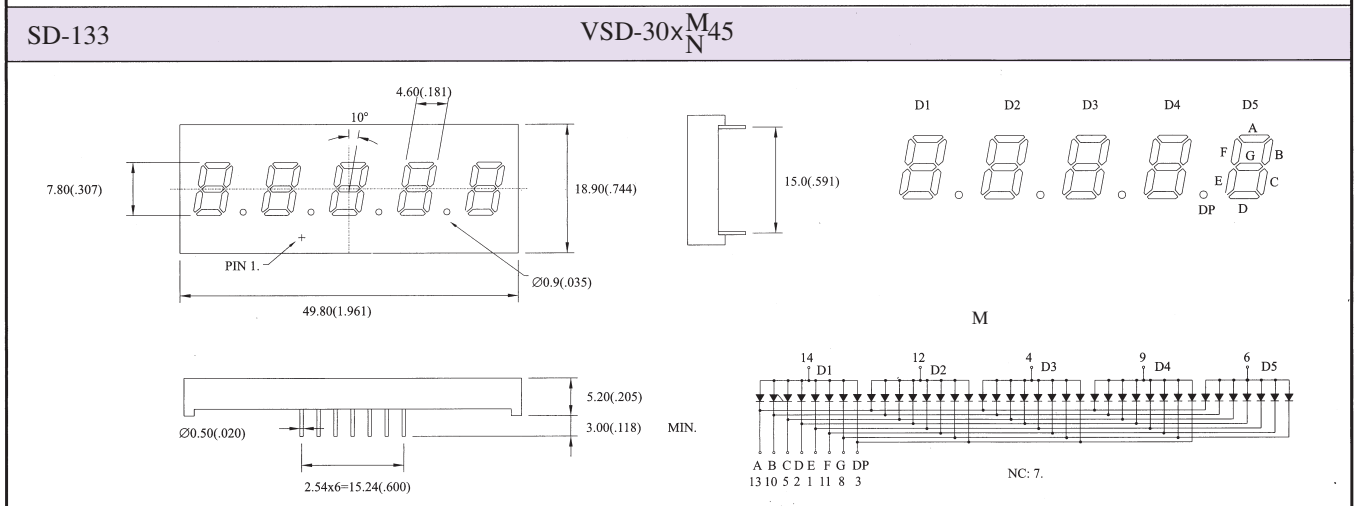
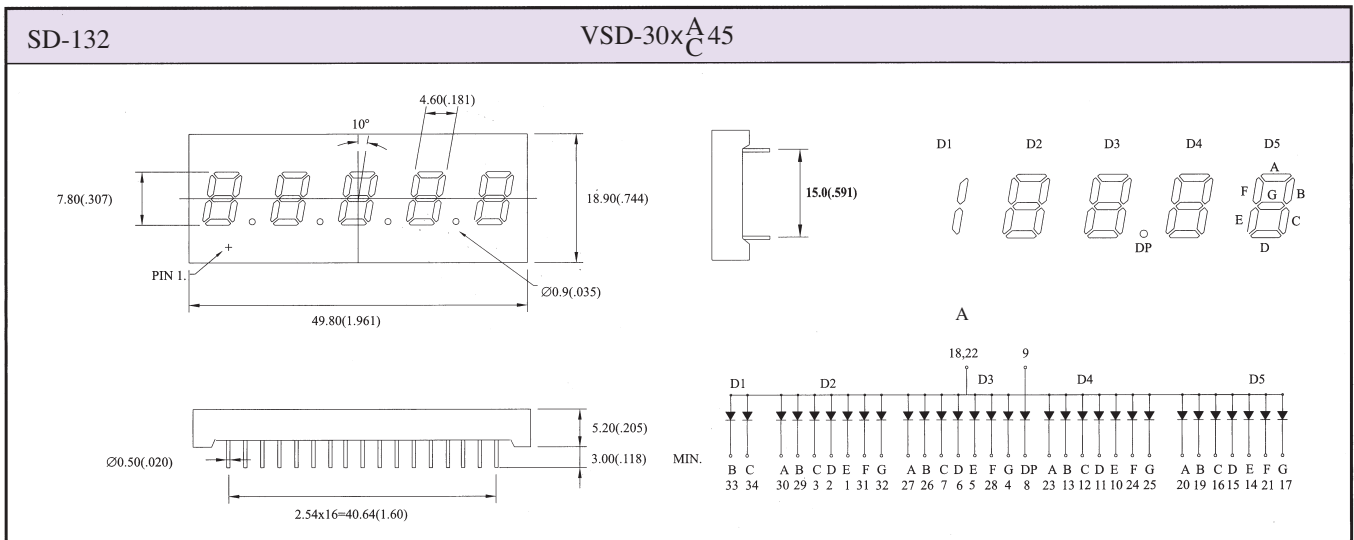
NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is  $\pm 0.25\text{mm}(.010\text{'})$   
4.NP:No Pin. 5.NC:No Connect



# FIVE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.	
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)		
									Typ.	Max.			
0.30" Five-Digit	VSD-302A45	VSD-302C45	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	SD-132	
	VSD-302A55	VSD-302C55											
	VSD-306A45	VSD-306C45	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0		
	VSD-305A45	VSD-305C45	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0		
	VSD-303A45	VSD-303C45	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0		
	VSD-304A45	VSD-304C45	GaAsP/GaP/ Orange										
	VSD-300A45	VSD-300C45	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0		
	VSD-300R1A45	VSD-300R1C45	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		
	VSD-302M45	VSD-302N45	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2		SD-133
	VSD-302M55	VSD-302N55											
	VSD-306M45	VSD-306N45	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0		
	VSD-305M45	VSD-305N45	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0		
	VSD-303N45	VSD-303N45	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0		
	VSD-304M45	VSD-304N45	GaAsP/GaP/ Orange										
VSD-300M45	VSD-300N45	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0			
VSD-300R1M45	VSD-300R1N45	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0			



NOTES: 1.ALL Dimensions are in millimeters(inches).  
 3.Specifications are subject to change without notice.

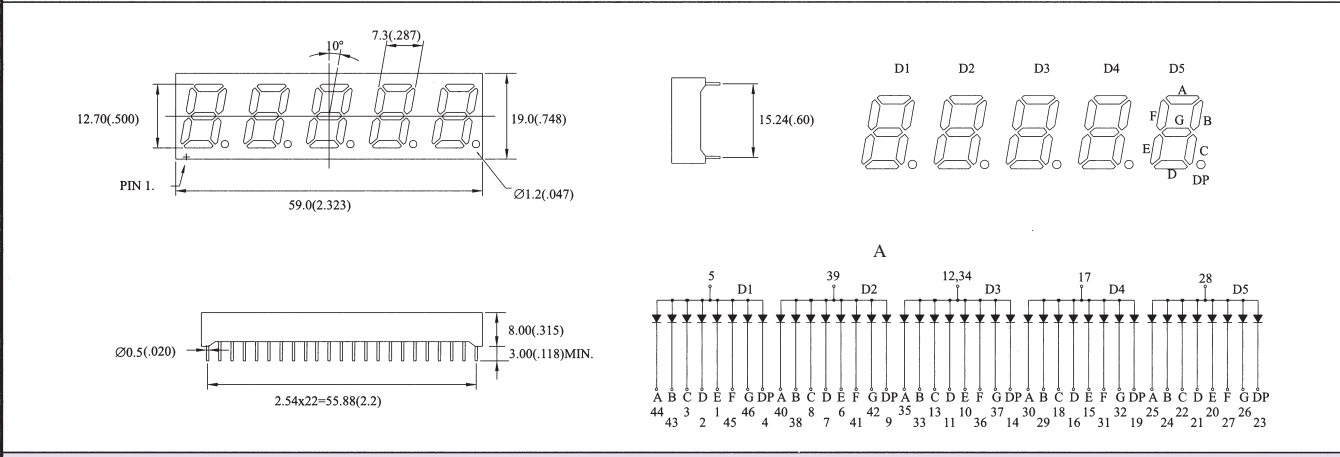
2.Tolerance is  $\pm 0.25\text{mm}(.010")$   
 4.NP:No Pin. 5.NC:No Connect



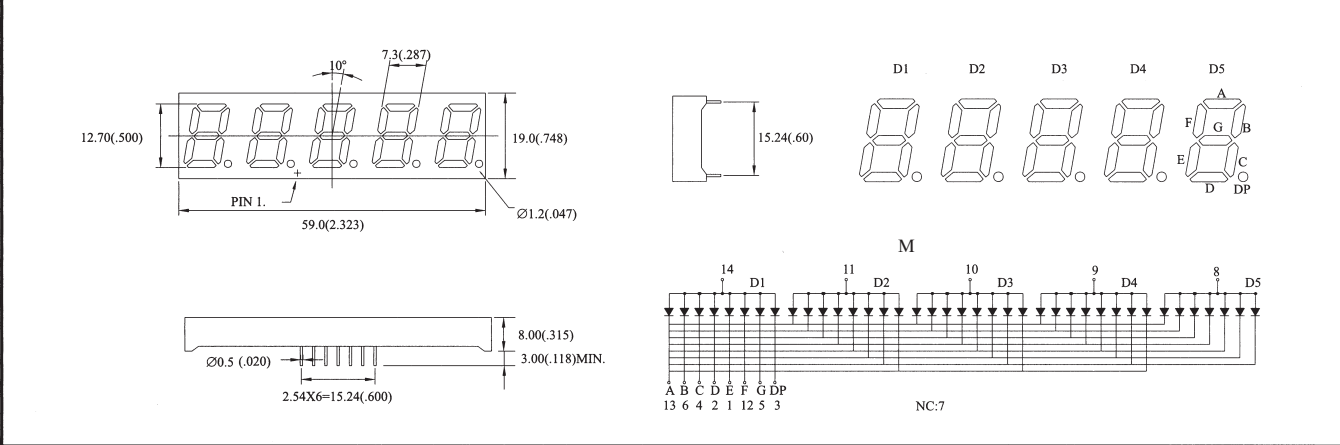
# FIVE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.50" Five-Digit			GaAsP/Red	655	40	80	40	200	1.7	2.0	1.0	SD-134
	VSD-502A45	VSD-502C45	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	
	VSD-502A55	VSD-502C55										
	VSD-506A45	VSD-506C45	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-505A45	VSD-505C45	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-503A45	VSD-503C45	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-504A45	VSD-504C45	GaAsP/GaP/ Orange									
	VSD-500A45	VSD-500C45	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
	VSD-500R1A45	VSD-500R1C45	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5	
			GaAsP/Red	655	40	80	40	200	1.7	2.0	1.0	SD-135
	VSD-502M45	VSD-502N45	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	
	VSD-502M55	VSD-502N55										
	VSD-506M45	VSD-506N45	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-505M45	VSD-505N45	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-503M45	VSD-503N45	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-504M45	VSD-504N45	GaAsP/GaP/ Orange									
	VSD-500M45	VSD-500N45	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.5	
	VSD-500R1M45	VSD-500R1N45	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.5	

SD-134 VSD-50x<sup>A</sup>C45



SD-135 VSD-50x<sup>M</sup>N45

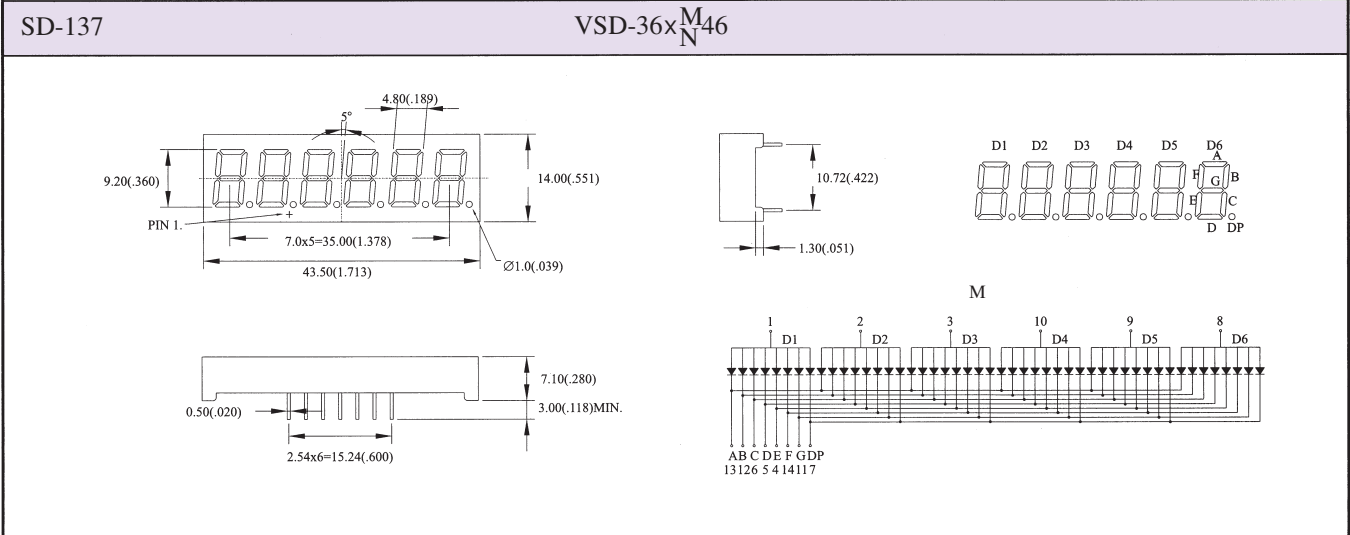
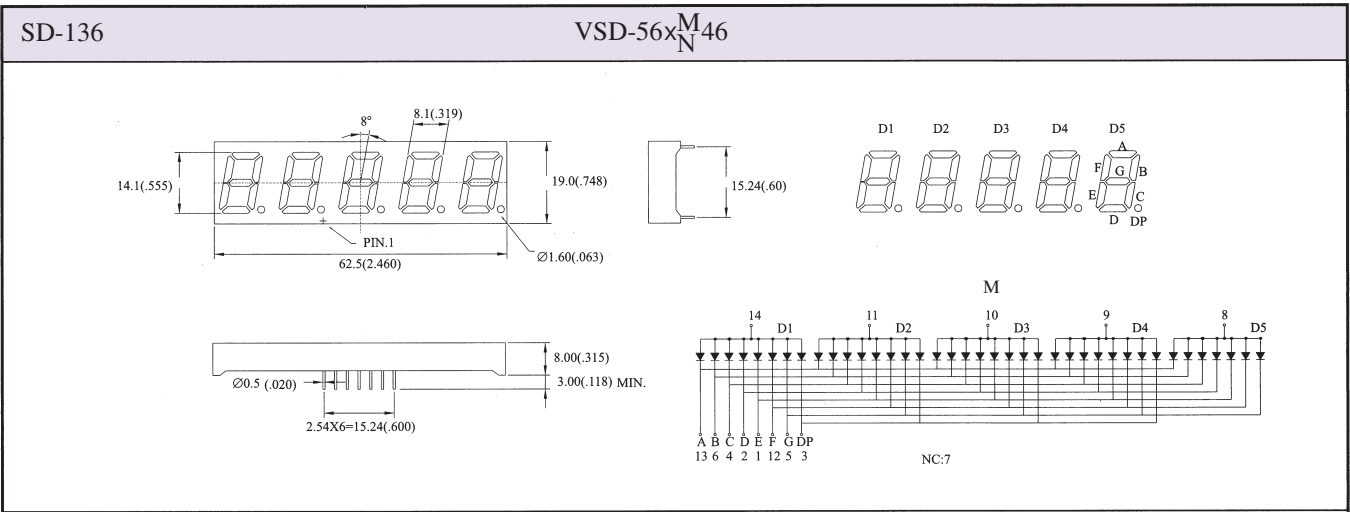


- NOTES: 1.ALL Dimensions are in millimeters(inches).  
 2.Tolerance is  $\pm 0.25\text{mm}(.010\text{'})$   
 3.Specifications are subject to change without notice.  
 4.NP:No Pin. 5.NC:No Connect



# FIVE DIGIT LED DISPLAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length p(nm)	(nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.56" Five-Digit			GaAsP/Red	655	40	80	40	200	1.7	2.0	1.0	SD-136
	VSD-562M46	VSD-562N46	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.5	
	VSD-562M56	VSD-562N56										
	VSD-566M46	VSD-566N46	GaP/ Green	568	30	80	30	150	2.2	2.5	3.5	
	VSD-565M46	VSD-565N46	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.5	
	VSD-563M46	VSD-563N46	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.5	
	VSD-564M46	VSD-564N46	GaAsP/GaP/ Orange									
	VSD-560M46	VSD-560N46	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	7.0	
VSD-560R1M46	VSD-560R1N46	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	8.0		
0.36" Six-Digit			GaAsP/Red	655	40	80	40	200	1.7	2.0	0.6	SD-137
	VSD-362M46	VSD-362N46	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.2	
	VSD-362M56	VSD-362N56										
	VSD-366M46	VSD-366N46	GaP/ Green	568	30	80	30	150	2.2	2.5	3.0	
	VSD-365M46	VSD-365N46	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	2.0	
	VSD-363M46	VSD-363N46	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	3.0	
	VSD-364M46	VSD-364N46	GaAsP/GaP/ Orange									
	VSD-360M46	VSD-360N46	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	6.0	
VSD-360R1M46	VSD-360R1N46	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	7.0		



NOTES: 1.ALL Dimensions are in millimeters(inches). 2.Tolerance is±0.25mm(.010")  
 3.Specifications are subject to change without notice. 4.NP:No Pin. 5.NC:No Connect





# LED LIGHT BAR & BAR GRAPH ARRAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
1.78*5.10mm 10Bar Graph Array												BA-01
	VBA-252U410		GaP/ Bright Red	700	90	40	15	50	2.2	2.5	2.0	
	VBA-256U410		GaP/ Green	568	30	80	30	150	2.2	2.5	5.0	
	VBA-255U410		GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	4.5	
	VBA-253U410		GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	5.0	
	VBA-254U410		GaAsP/GaP/ Orange									
	VBA-250U410		GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	8.0	
VBA-250R1U410		GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	9.0		
1.70*5.00mm 5Bar Graph Array												BA-02
	VBA-252U45		GaP/ Bright Red	700	90	40	15	50	2.2	2.5	2.0	
	VBA-256U45		GaP/ Green	568	30	80	30	150	2.2	2.5	5.0	
	VBA-255U45		GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	4.5	
	VBA-253U45		GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	5.0	
	VBA-254U45		GaAsP/GaP/ Orange									
	VBA-250U45		GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	8.0	
VBA-250R1U45		GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	9.0		
1.50*4.00mm 12Bar Graph Array												BA-03
	VBA-242U412		GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.8	
	VBA-246U412		GaP/ Green	568	30	80	30	150	2.2	2.5	4.5	
	VBA-245U412		GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	3.5	
	VBA-243U412		GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	4.5	
	VBA-244U412		GaAsP/GaP/ Orange									
	VBA-240U412		GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	10.0	
VBA-240R1U412		GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	12.0		
1.50*4.00mm 12Bar Graph Array												BA-04
	VBA-242U412-1		GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.8	
	VBA-246U412-1		GaP/ Green	568	30	80	30	150	2.2	2.5	4.5	
	VBA-245U412-1		GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	3.5	
	VBA-243U412-1		GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	4.5	
	VBA-244U412-1		GaAsP/GaP/ Orange									
	VBA-240U412-1		GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	10.0	
VBA-240R1U412-1		GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	12.0		
2.50*7.00mm 9Bar Graph Array												BA-05
	VBA-372A49	VBA-372C49	GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.8	
	VBA-376A49	VBA-376C49	GaP/ Green	568	30	80	30	150	2.2	2.5	4.5	
	VBA-375A49	VBA-375C49	GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	3.5	
	VBA-373A49	VBA-373C49	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	4.5	
	VBA-374A49	VBA-374C49	GaAsP/GaP/ Orange									
	VBA-370A49	VBA-370C49	GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	10.0	
VBA-370R1A49	VBA-370R1C49	GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	12.0		
1.78*5.10mm 15Bar Graph Array												BA-06
	VBA-252U415		GaP/ Bright Red	700	90	40	15	50	2.2	2.5	1.8	
	VBA-256U415		GaP/ Green	568	30	80	30	150	2.2	2.5	4.5	
	VBA-255U415		GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	3.5	
	VBA-253U415		GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	4.5	
	VBA-254U415		GaAsP/GaP/ Orange									
	VBA-250U415		GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	10.0	
VBA-250R1U415		GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	12.0		



# LED LIGHT BAR & BAR GRAPH ARRAYS

<p><b>BA-01</b>      <b>VBA-25xU410</b></p> <p>Dimensions: 5.1(200), 1.78(070), 2.54(100), 25.30(996), 10.16(400), 0.25(.010), 7.62(300), 8.0(315), 3.0(120) MIN., 2.54(100), 0.50(.020).</p> <p>Pin Configuration: 20 pins labeled A through J, with PIN 1 at the bottom left.</p>	<p><b>BA-02</b>      <b>VBA-25xU45</b></p> <p>Dimensions: 2.54x4=10.16(400), 1.70(067), 5.0(197), 12.70(500), 10.10(398), 7.62(300), 7.90(311), 3.00(116) MIN., 0.5(.020), 2.54x4=10.16(400).</p> <p>Pin Configuration: 10 pins labeled A through E, with PIN 1 at the bottom left.</p>
<p><b>BA-03</b>      <b>VBA-24xU412</b></p> <p>Dimensions: 4.30x11=47.30(1.862), 1.50(.059), 4.00(.157), 56.00(2.205), 58.00(2.283), 5.00(.197), 1.60(.063), 7.00(.276), 0.50(.020), 8.00(.315), 3.00(.118) MIN., 0.50(.020), 2.54x20=50.80(2.00).</p> <p>Pin Configuration: 21 pins labeled A through L, with PIN 1 at the bottom left.</p> <p>NP: 12.</p>	<p><b>BA-04</b>      <b>VBA-24xU412-1</b></p> <p>Dimensions: 4.30x11=47.30(1.862), 1.50(.059), 4.00(.157), 56.00(2.205), 58.00(2.283), 5.00(.197), 1.60(.063), 7.00(.276), 0.50(.020), 8.00(.315), 3.00(.118) MIN., 0.50(.020), 2.54x20=50.80(2.00).</p> <p>Pin Configuration: 21 pins labeled A through L, with PIN 1 at the bottom left.</p> <p>NP: 11.</p>
<p><b>BA-05</b>      <b>VBA-37x<sup>A</sup><sub>C</sub>49</b></p> <p>Dimensions: 4.50x8=36.00(1.417), 7.00(.276), 2.50(.098), 9.00(.354), 11.00(.433), 41.40(1.630), 43.40(1.709), 0.50(.020), 8.00(.315), 3.00(.118) MIN., 0.50(.020), 4.5(1.77)x9=40.5(1.59).</p> <p>Pin Configuration: 10 pins labeled A through I, with PIN 1 at the bottom left.</p> <p>A</p> <p>Pin Configuration: 10 pins labeled A through I, with PIN 1 at the bottom left.</p>	<p><b>BA-06</b>      <b>VBA-25xU415</b></p> <p>Dimensions: 1.78(070), 2.54(100) TYP., 0.381(.015), 5.1(200), 10.16(400), 0.25(.010), 7.62(300), 38.1(1.500) MAX., 6.223 ± 0.127 (0.245 ± .005) MIN., 3.00(.118) MIN., 0.50(.020), 2.54(100)x14=35.56(1.400).</p> <p>Pin Configuration: 30 pins labeled A through R, with PIN 1 at the bottom left.</p>

NOTES: 1. ALL Dimensions are in millimeters (inches).  
 2. Tolerance is ±0.25mm (.010")  
 3. Specifications are subject to change without notice.  
 4. NP: No Pin.    5. NC: No Connect



# LED LIGHT BAR & BAR GRAPH ARRAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
7.50*13.9mm Light Bar												RD-07
	VBA-8152U0		GaP/ Bright Red	700	90	40	15	50	2.2	2.5	4.0	
	VBA-8156U0		GaP/ Green	568	30	80	30	150	2.2	2.5	9.0	
	VBA-8155U0		GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	8.0	
	VBA-8153U0		GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	
	VBA-8154U0		GaAsP/GaP/ Orange									
	VBA-8150U0		GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	15.0	
VBA-8150R1U0		GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	18.0		
10.0*20.2mm Light Bar												RD-08
	VBA-10202U0		GaP/ Bright Red	700	90	40	15	50	2.2	2.5	6.0	
	VBA-10206U0		GaP/ Green	568	30	80	30	150	2.2	2.5	12.0	
	VBA-10205U0		GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	10.0	
	VBA-10203U0		GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	
	VBA-10204U0		GaAsP/GaP/ Orange									
	VBA-10200U0		GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	16.0	
VBA-10200R1U0		GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	20.0		
15.0*15.0mm Light Bar												RD-09
	VBA-15152U0		GaP/ Bright Red	700	90	40	15	50	2.2	2.5	6.0	
	VBA-15156U0		GaP/ Green	568	30	80	30	150	2.2	2.5	8.0	
	VBA-15155U0		GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	7.0	
	VBA-15153U0		GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	8.0	
	VBA-15154U0		GaAsP/GaP/ Orange									
	VBA-15150U0		GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	12.0	
	VBA-15150R1U0		GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	15.0	
												RD-10
	VBA-15152U0-1		GaP/ Bright Red	700	90	40	15	50	2.2	2.5	6.0	
	VBA-15156U0-1		GaP/ Green	568	30	80	30	150	2.2	2.5	8.0	
	VBA-15155U0-1		GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	7.0	
	VBA-15153U0-1		GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	8.0	
	VBA-15154U0-1		GaAsP/GaP/ Orange									
	VBA-15150U0-1		GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	12.0	
	VBA-15150R1U0-1		GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	15.0	
												RD-11
	VBA-15152U0-2		GaP/ Bright Red	700	90	80	15	50	4.4	5.0	6.0	
	VBA-15156U0-2		GaP/ Green	568	30	160	30	150	4.4	5.0	8.0	
	VBA-15155U0-2		GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0	7.0	
	VBA-15153U0-2		GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	8.0	
VBA-15154U0-2		GaAsP/GaP/ Orange										
VBA-15150U0-2		GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	12.0		
VBA-15150R1U0-2		GaAlAs/ DH Super Red	660	20	160	30	150	3.4	5.0	15.0		
											RD-12	
VBA-15152U0-3		GaP/ Bright Red	700	90	40	15	50	2.2	2.5	12.0		
VBA-15156U0-3		GaP/ Green	568	30	80	30	150	2.1	2.5	16.0		
VBA-15155U0-3		GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	14.0		
VBA-15153U0-3		GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	16.0		
VBA-15154U0-3		GaAsP/GaP/ Orange										
VBA-15150U0-3		GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	20.0		
VBA-15150R1U0-3		GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	24.0		



# LED LIGHT BAR & BAR GRAPH ARRAYS

<p><b>BA-07</b>      <b>VBA-815xU0</b></p>	<p><b>BA-08</b>      <b>VBA-1020xU0</b></p>
<p><b>BA-09</b>      <b>VBA-1515xU0</b></p>	<p><b>BA-10</b>      <b>VBA-1515xU0-1</b></p>
<p><b>BA-11</b>      <b>VBA-1515xU0-2</b></p>	<p><b>BA-12</b>      <b>VBA-1515xU0-3</b></p>

NOTES: 1.ALL Dimensions are in millimeters(inches).  
 2.Tolerance is±0.25mm(.010")  
 3.Specifications are subject to change without notice.  
 4.NP:No Pin.      5.NC:No Connect



# LED LIGHT BAR & BAR GRAPH ARRAYS

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length p(nm)	(nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
15.0*15.0mm Light Bar			GaAsP/Red	655	40	160	40	200	3.4	4.0	6.0	BA-13
	VBA-15152U0-4		GaP/ Bright Red	700	90	80	15	50	4.4	5.0	8.0	
	VBA-15156U0-4		GaP/ Green	568	30	160	30	150	4.4	5.0	16.0	
	VBA-15155U0-4		GaAsP/GaP/ Yellow	585	35	160	30	150	4.2	5.0	14.0	
	VBA-15153U0-4		GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	16.0	
	VBA-15154U0-4		GaAsP/GaP/ Orange									
	VBA-15150U0-4		GaAlAs/ SH Super Red	660	20	160	30	150	3.4	5.0	20.0	
	VBA-15150R1U0-4		GaAlAs/ DH Super Red	660	20	160	30	150	3.4	5.0	24.0	
Cylindrical Ø 8.50 Light Bar			GaAsP/Red	655	40	400	40	200	8.5	10.0	5.0	BA-14
	VBA-8C2U0		GaP/ Bright Red	700	90	195	15	50	11.0	12.5	6.0	
	VBA-8C6U0		GaP/ Green	568	30	390	30	150	11.0	12.5	10.0	
	VBA-8C5U0		GaAsP/GaP/ Yellow	585	35	390	30	150	10.5	12.5	8.0	
	VBA-8C3U0		GaAsP/GaP/ Hi-Eff.Red	635	45	390	30	150	10.0	12.5	10.0	
	VBA-8C4U0		GaAsP/GaP/ Orange									
	VBA-8C0U0		GaAlAs/ SH Super Red	660	20	390	30	150	8.5	12.5	12.0	
	VBA-8C0R1U0		GaAlAs/ DH Super Red	660	20	390	30	150	8.5	12.5	20.0	
33.0*22.0mm Light Bar			GaAsP/Red	655	40	320	40	200	6.8	8.0	3.0	BA-15
	VBA-33222U0		GaP/ Bright Red	700	90	160	15	50	8.4	10.0	6.0	
	VBA-33226U0		GaP/ Green	568	30	310	30	150	8.4	10.0	8.0	
	VBA-33225U0		GaAsP/GaP/ Yellow	585	35	310	30	150	8.0	10.0	7.0	
	VBA-33223U0		GaAsP/GaP/ Hi-Eff.Red	635	45	310	30	150	7.6	10.0	8.0	
	VBA-33224U0		GaAsP/GaP/ Orange									
	VBA-33220U0		GaAlAs/ SH Super Red	660	20	310	30	150	6.8	10.0	12.0	
	VBA-33220R1U0		GaAlAs/ DH Super Red	660	20	310	30	150	6.8	10.0	14.0	
Triangular Light Bar			GaAsP/Red	655	40	80	40	200	1.7	2.0	3.5	BA-16
	VBA-27112U0		GaP/ Bright Red	700	90	40	15	50	2.2	2.5	7.0	
	VBA-27116U0		GaP/ Green	568	30	80	30	150	2.2	2.5	10.0	
	VBA-27115U0		GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	9.0	
	VBA-27113U0		GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	10.0	
	VBA-27114U0		GaAsP/GaP/ Orange									
	VBA-27110U0		GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	15.0	
	VBA-27110R1U0		GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	17.0	
32.0*32.0mm Light Bar			GaAsP/Red	655	40	80	40	200	1.7	2.0	12.0	BA-17
	VBA-32322U0		GaP/ Bright Red	700	90	40	15	50	2.2	2.5	15.0	
	VBA-32326U0		GaP/ Green	568	30	80	30	150	2.2	2.5	20.0	
	VBA-32325U0		GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	19.0	
	VBA-32323U0		GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	20.0	
	VBA-32324U0		GaAsP/GaP/ Orange									
	VBA-32320U0		GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	24.0	
	VBA-32320R1U0		GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	26.0	
6.80*19.8mm Light Bar			GaAsP/Red	655	40	80	40	200	1.7	2.0	4.0	BA-18
	VBA-7202U0		GaP/ Bright Red	700	90	40	15	50	2.2	2.5	5.0	
	VBA-7206U0		GaP/ Green	568	30	80	30	150	2.2	2.5	9.0	
	VBA-7205U0		GaAsP/GaP/ Yellow	585	35	80	30	150	2.1	2.5	8.0	
	VBA-7203U0		GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	
	VBA-7204U0		GaAsP/GaP/ Orange									
	VBA-7200U0		GaAlAs/ SH Super Red	660	20	80	30	150	1.7	2.5	12.0	
	VBA-7200R1U0		GaAlAs/ DH Super Red	660	20	80	30	150	1.7	2.5	14.0	





# LED LIGHT BAR & BAR GRAPH ARRAYS

<p><b>BA-13</b>      <b>VBA-1515xU0-4</b></p>	<p><b>BA-14</b>      <b>VBL-8CxU0</b></p>
<p><b>BA-15</b>      <b>VBA-3322xU0</b></p>	<p><b>BA-16</b>      <b>VBA-2711xU0</b></p>
<p><b>BA-17</b>      <b>VBA-3232xU0</b></p>	<p><b>BA-18</b>      <b>VBA-720xU0</b></p>

NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is±0.25mm(.010")  
4.NP:No Pin. 5.NC:No Connect



# LED DOT MATRIX DISPLAY

(1) (2) (3) (4) (5) (6) (7) (8)  
 VXX -       -



VINCENC HOME DEVELOPMENT CO., LTD.

- (1) PRODUCT TYPE → → → (1) DT : Dot-Matrix Display  
 (2) DOTS OF COLUMN AND ROW  
 (3) EMITTING COLOR  
 (4) DRIVING CIRCUIT  
 (5) SURFACE COLOR & SEGMENT COLOR COMBINATION  
 (6) HIGH  
 (7) SIZE (8) Demand order

- (2) DOTS OF COLUMN AND ROW  
 57 : 5X7      58 : 5X8      88 : 8X8      1616: 16X16

- (3) EMITTING COLOR :
- |  |  |
|--|--|
| 0 : GaAlAs/GaAs 660nm / Super Red            | 0R1 : GaAlAs 660nm / DH Red              |
| 0R2 : GaAlAs/GaAlAs 660nm/ DDH Super Red     | 2 : GaP 700nm / Bright Red               |
| 3 : GaAsP/GaP 635nm / Hi-Eff Red             | 4 : GaAsP/GaP 635nm / Orange             |
| 4O1 / 4O3 : AlGaInP 620nm / Super Orange ReD | 4O2 : AlGaInP 630nm / Super Orange Red   |
| 5 : GaAsP/ GaP 583nm / Yellow                | 5Y1 / 5Y3 : AlGaInP 590nm / Super Yellow |
| 5Y2 : AlGaInP 595nm / Super Yellow           | 6 : GaP/GaP 568nm / Yellow Green         |
| 6G1 : GaP/GaP 568nm / Hi-Eff Green           | 6P : GaP/GaP 557nm / Pure Green          |
| 6G2 : AlGaInP 570nm / Super Yellow Green     | 6G3 : InGaN 505nm / Bluish Green         |
| 6G4 : InGaN 525nm / Green                    | 6G5 : AlGaInP 525nm / Green              |
| 7 : GaAsP/ GaP 610nm / Amber                 | 7A1 : AlGaInP 610nm / Amber              |
| 7A2 : AlGaInP 613nm / Amber                  | 8 : AlInGaN 460nm / Super Blue           |
| 8B1 : AlInGaN 470nm / Super Blue             |  |

- (4) DRIVING CIRCUIT :  
 A : Multiplex Drive, Column Anode Com. & Row Anode Com.  
 C : Multiplex Drive, Column Anode Com. & Row Anode Com.

- (5) SURFACE COLOR & SEGMENT COLOR COMBINATION :
- |                                  |                                |
|----------------------------------|--------------------------------|
| 4 : Black Surface, White Segment | 5 : Black Surface, Red Segment |
| 6 : Gray Surface, White Segment  | 7 : Red Surface, White Segment |
| 8 : Red Surface, Red Segment     | 9 : Gray Surface, Red Segment  |
| 0 : White Surface, White Segment |                                |

- (6) HIGH :
- |               |             |               |         |
|---------------|-------------|---------------|---------|
| 2 : 1.2~2 φ   | 3 : 3 φ     | 4 : 3.1~4.0 φ | 5 : 5 φ |
| 8 : 7.1~8.0 φ | 10 : 10 φ   | 11 : 11 φ     |         |
| 6S : 6.1*6.1  | 12S : 12*12 |               |         |

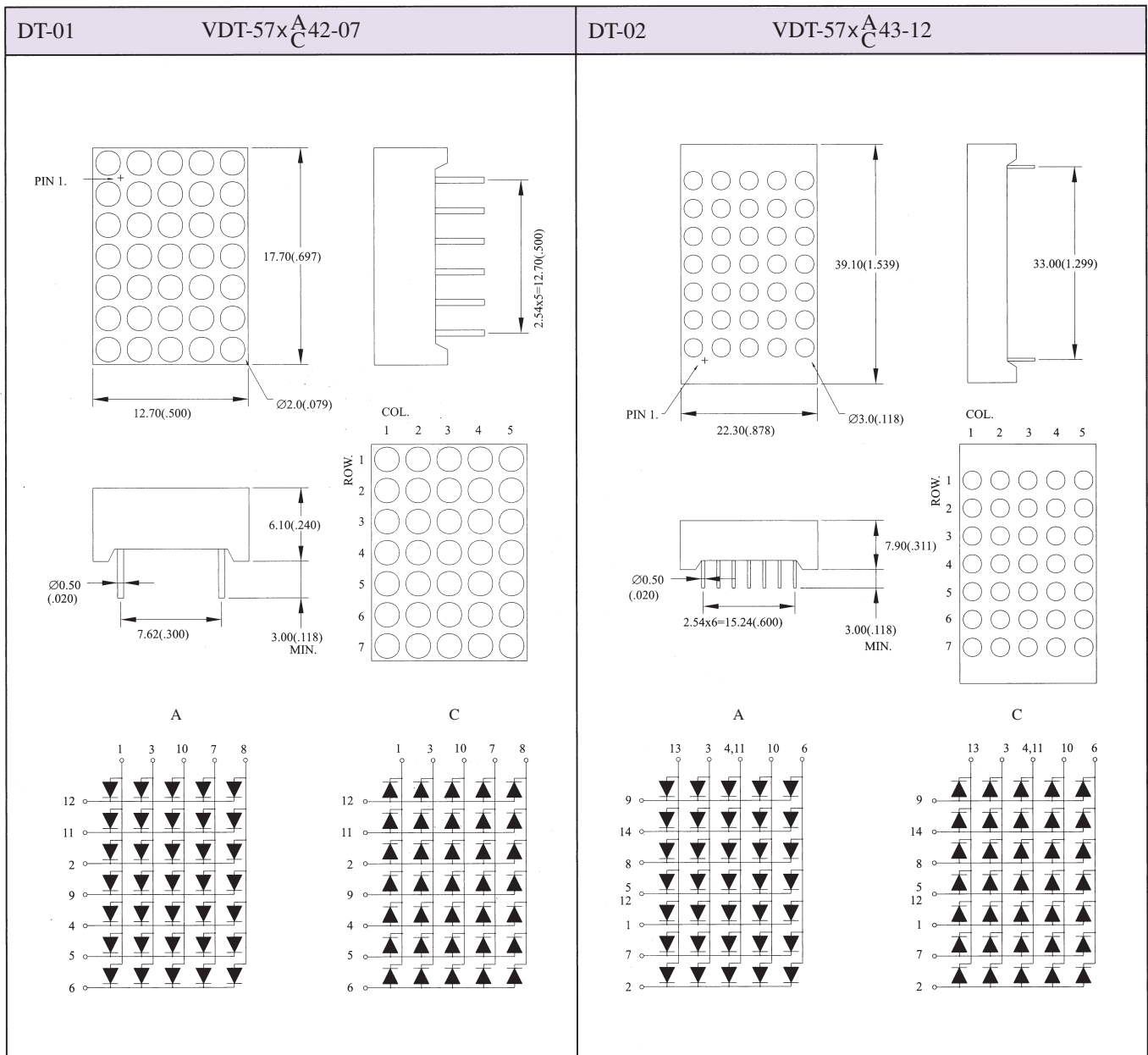
- (7) SIZE  
 0.7" : 07 1.2" : 12 1.0" : 10 2.0" : 20 3.0" : 30  
 4.0" : 40

- (8) Demand order      No code : Standard  
                                  Other code : Customer design



# LED DOT MATRIX DISPLAY

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.70" High Ø2.0	VDT-576A42-07	VDT-576C42-07	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	8.0	DT-01
	VDT-573A42-07	VDT-573C42-07	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	8.0	
	VDT-570R1A42-07	VDT-570R1C42-07	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	12.0	
	VDT-570I1A42-07	VDT-570I1C42-07	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	28.0	
	VDT-575Y1A42-07	VDT-575Y1C42-07	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	30.0	
1.20" High Ø3.0	VDT-576A43-12	VDT-576C43-12	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	8.0	DT-02
	VDT-573A43-12	VDT-573C43-12	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	8.0	
	VDT-570R1A43-12	VDT-570R1C43-12	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	12.0	
	VDT-570I1A43-12	VDT-570I1C43-12	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	28.0	
	VDT-575Y1A43-12	VDT-575Y1C43-12	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	30.0	



NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

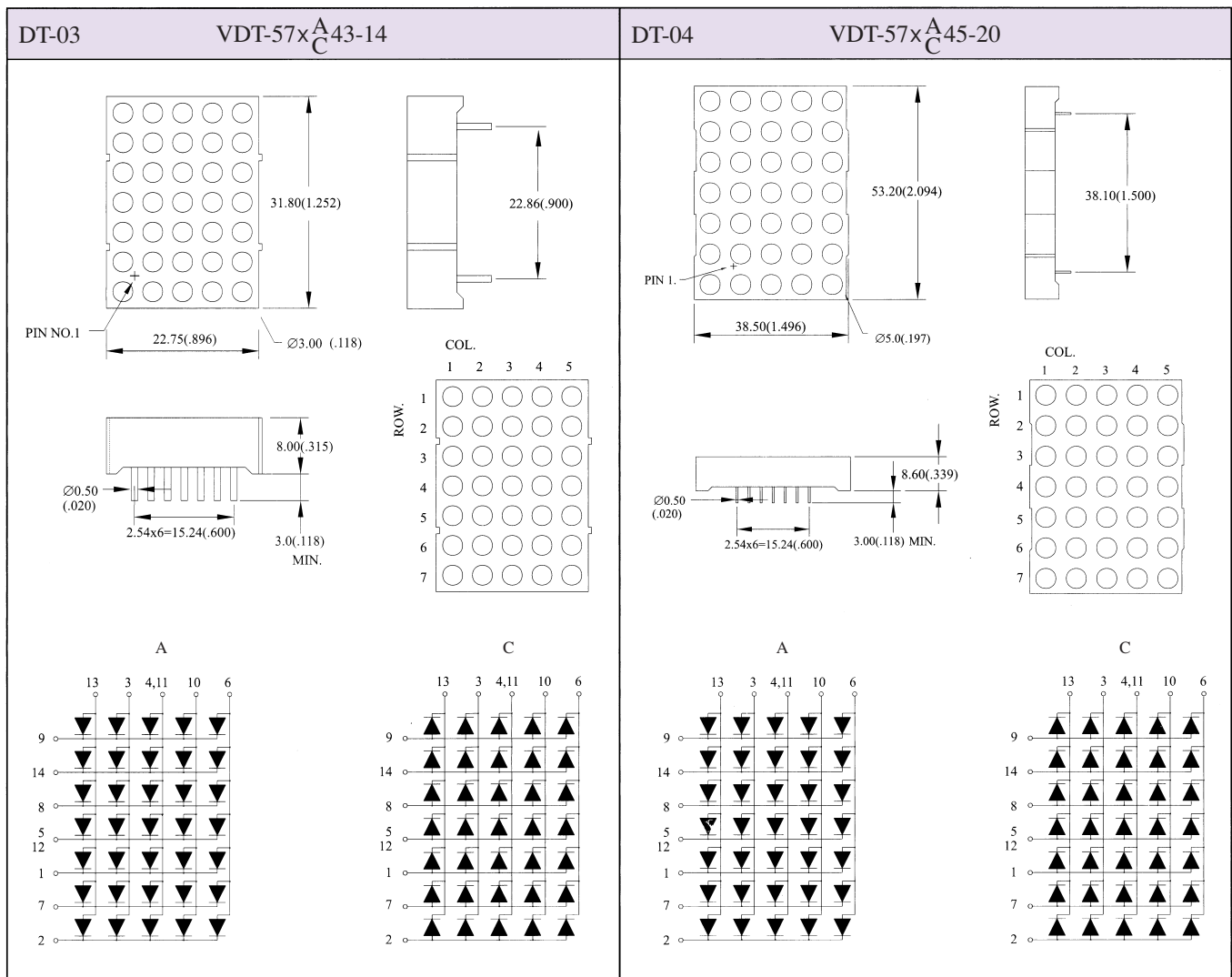
2.Tolerance is±0.25mm(.010")  
4.NP:No Pin. 5.NC:No Connect



# LED DOT MATRIX DISPLAY

## Single Color 5x7 Dot Matrix Displays

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
1.4" High Ø3.0	VDT-576A43-14	VDT-576C43-14	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	8.0	DT-03
	VDT-573A43-14	VDT-573C43-14	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	8.0	
	VDT-573A53-14	VDT-573C53-14	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	
	VDT-570R1A43-14	VDT-570R1C43-14	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	12.0	
	VDT-570R2A43-14	VDT-570R2A43-14	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	16.0	
	VDT-570R3A43-14	VDT-570R3A43-14	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	18.0	
	VDT-574O1A43-14	VDT-574O1A43-14	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	20.0	
	VDT-575Y1A43-14	VDT-575Y1A43-14	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	20.0	
2.0" High Ø5.0	VDT-576A45-20	VDT-576C45-20	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	9.0	DT-04
	VDT-573A45-20	VDT-573C45-20	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	
	VDT-573A55-20	VDT-573C55-20	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	14.0	
	VDT-570R1A45-20	VDT-570R1C45-20	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	14.0	
	VDT-570R2A45-20	VDT-570R2C45-20	GaAlAs/ SH/ Super Red	660	20	80 <td 30	150	1.7	2.5	18.0		
	VDT-570R3A45-20	VDT-570R3C45-20	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	20.0	
	VDT-574O1A45-20	VDT-574O1A45-20	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	22.0	
	VDT-575Y1A45-20	VDT-575Y1A45-20	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	22.0	



NOTES: 1.ALL Dimensions are in millimeters(inches).

3.Specifications are subject to change without notice.

2.Tolerance is $\pm 0.25$ mm(.010")

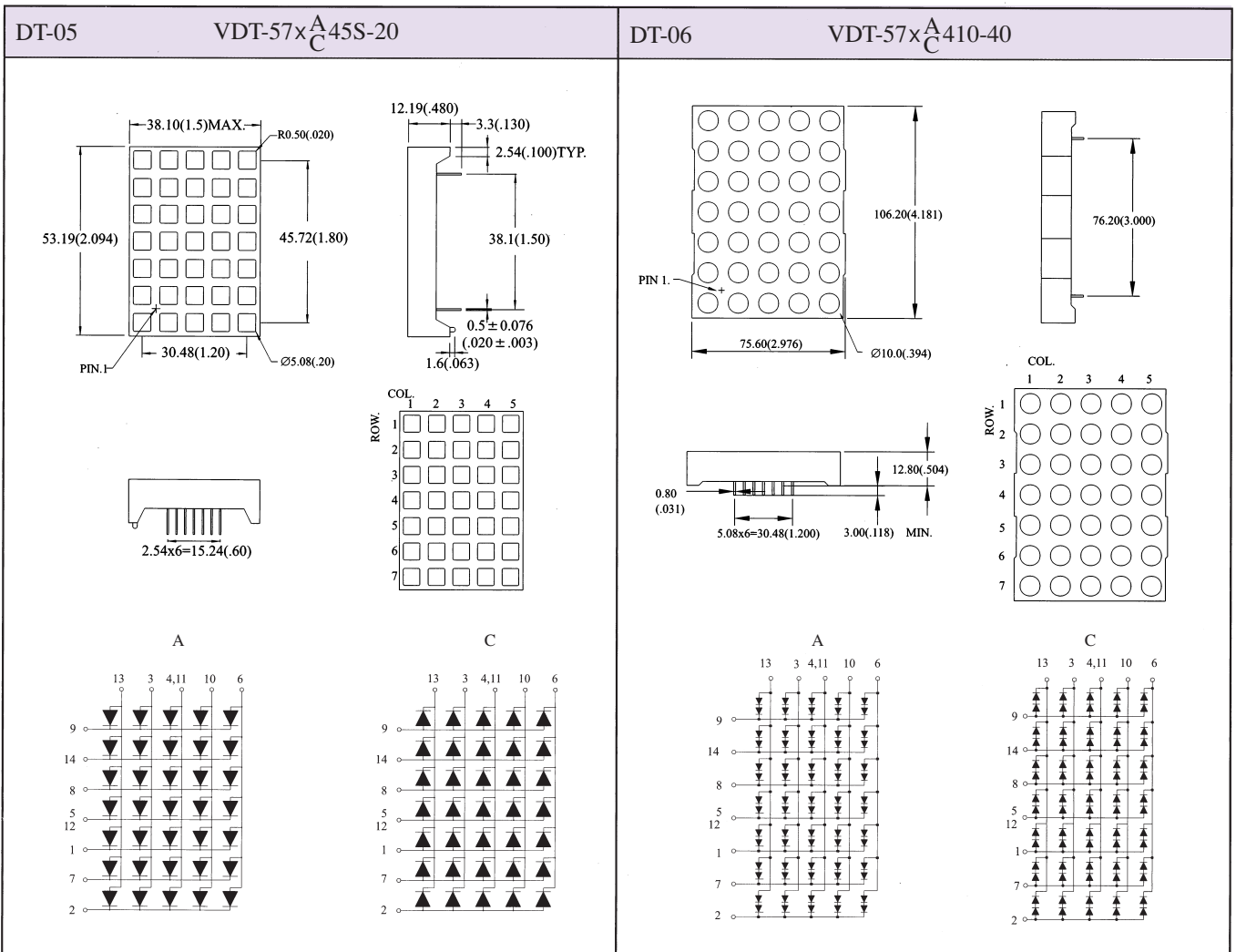
4.NP:No Pin. 5.NC:No Connect



# LED DOT MATRIX DISPLAY

## Single Color 5x7 Dot Matrix Displays

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length p(nm)	(nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
2.00" High Ø5.0	VDT-576A45S-20	VDT-576C45S-20	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	12.0	DT-05
	VDT-573A45S-20	VDT-573C45S-20	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	
	VDT-573A55S-20	VDT-573C55S-20	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	16.0	
	VDT-570R1A45S-20	VDT-570R1C45S-20	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	16.0	
	VDT-570R2A45S-20	VDT-570R2C45S-20	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	24.0	
	VDT-570R3A45S-20	VDT-570R3C45S-20	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	22.0	
	VDT-574O1A45S-20	VDT-574O1C45S-20	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	30.0	
	VDT-575Y1A45S-20	VDT-575Y1C45S-20	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	32.0	
4.00" High Ø10.0	VDT-576A410-40	VDT-576C410-40	GaP/ GaP/ Yellow Green	568	30	160	30	150	4.2	5.0	15.0	DT-06
	VDT-573A410-40	VDT-573C410-40	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	15.0	
	VDT-573A510-40	VDT-573C510-40	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	18.0	
	VDT-570R1A410-40	VDT-570R1C410-40	GaAlAs/ SH/ Super Red	660	20	160	30	150	3.4	5.0	18.0	
	VDT-570R2A410-40	VDT-570R2C410-40	GaAlAs/ SH/ Super Red	660	20	160	30	150	3.4	5.0	25.0	
	VDT-570R3A410-40	VDT-570R3C410-40	GaAlAs/ DDH/ Super Red	660	20	160	30	150	4.0	5.0	20.0	
	VDT-574O1A410-40	VDT-574O1C410-40	AlGaInP/GaAs/ Ultra Orange	620	17	160	30	150	4.0	5.0	32.0	
	VDT-575Y1A410-40	VDT-575Y1C410-40	AlGaInP/GaAs/ Ultra Yellow	592	15	160	30	150	4.2	5.0	35.0	



NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is±0.25mm(.010")  
4.NP:No Pin. 5.NC:No Connect

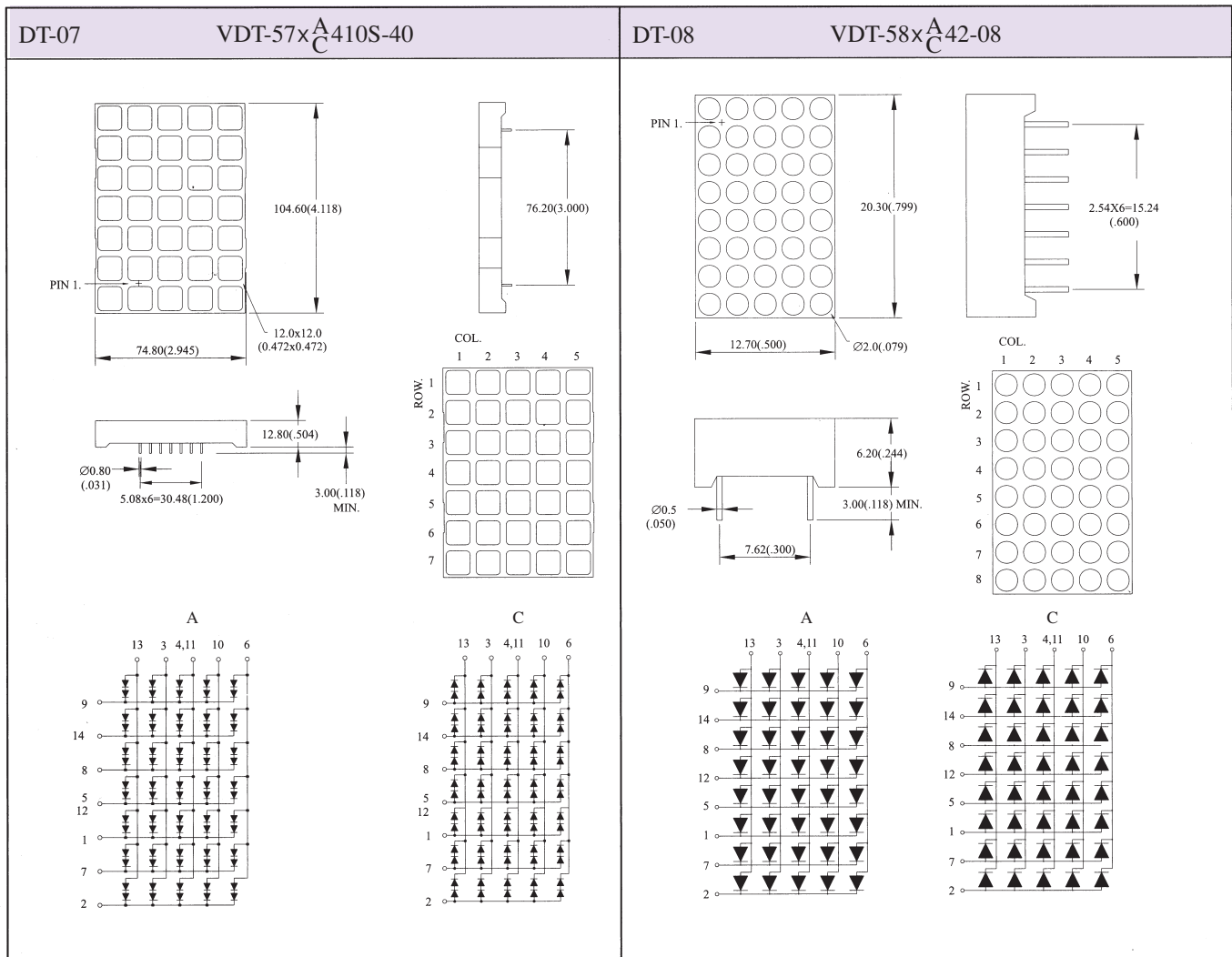




# LED DOT MATRIX DISPLAY

## Single Color 5x7 & 5x8 Dot Matrix Displays

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
4.00" High 12.0*12.0 mm	VDT-576A410S-40	VDT-576C410S-40	GaP/ GaP/ Yellow Green	568	30	160	30	150	4.2	5.0	15.0	DT-07
	VDT-573A410S-40	VDT-573C410S-40	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	15.0	
	VDT-573A510S-40	VDT-573C510S-40	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	23.0	
	VDT-570R1A410S-40	VDT-570R1C410S-40	GaAlAs/ SH/ Super Red	660	20	160	30	150	3.4	5.0	20.0	
	VDT-570R2A410S-40	VDT-570R2C410S-40	GaAlAs/ SH/ Super Red	660	20	160	30 <td 150	3.4	5.0	25.0		
	VDT-570R3A410S-40	VDT-570R3C410S-40	GaAlAs/ DDH/ Super Red	660	20	160	30	150	4.0	5.0	20.0	
	VDT-574O1A410S-40	VDT-574O1C410S-40	AlGaInP/GaAs/ Ultra Orange	620	17	160	30	150	4.0	5.0	32.0	
	VDT-575Y1A410S-40	VDT-575Y1C410S-40	AlGaInP/GaAs/ Ultra Yellow	592	15	160	30	150	4.2	5.0	35.0	
0.80" High $\varnothing 2.0$	VDT-586A42-08	VDT-586C42-08	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	8.0	DT-08
	VDT-583A42-08	VDT-583C42-08	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	8.0	
	VDT-583A52-08	VDT-583C52-08	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	
	VDT-580R1A42-08	VDT-580R1C42-08	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	12.0	
	VDT-580R2A42-08	VDT-580R2C42-08	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	16.0	
	VDT-580R3A42-08	VDT-580R3C42-08	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	18.0	
	VDT-584O1A42-08	VDT-584O1C42-08	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	20.0	
	VDT-585Y1A42-08	VDT-585Y1C42-08	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	20.0	



NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

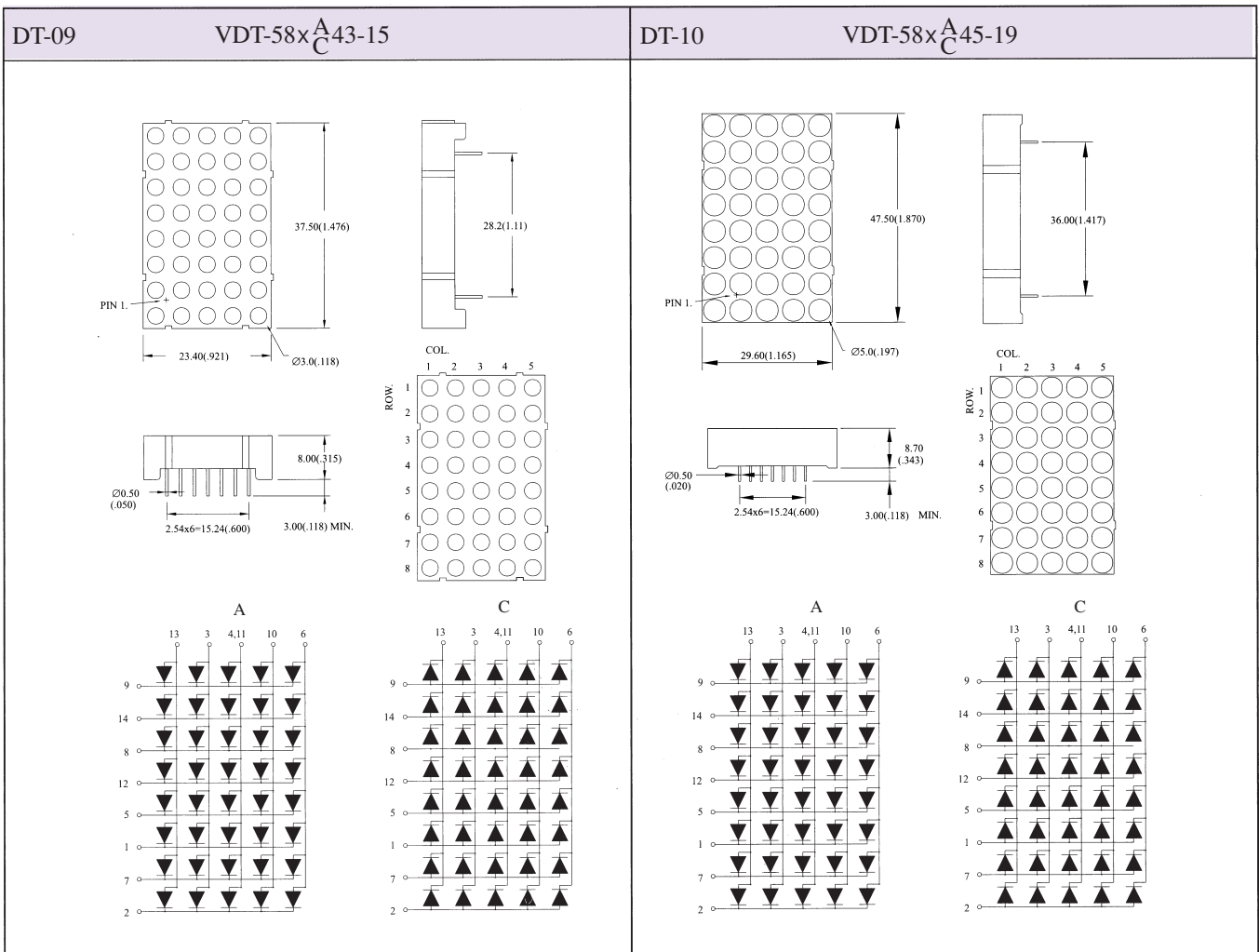
2.Tolerance is $\pm 0.25$ mm(.010")  
4.NP: No Pin. 5.NC:No Connect



# LED DOT MATRIX DISPLAY

## Single Color 5x8 Dot Matrix Displays

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
1.50" High $\varnothing$ 3.0	VDT-586A43-15	VDT-586C43-15	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	9.0	DT-09
	VDT-583A43-15	VDT-583C43-15	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	
	VDT-583A53-15	VDT-583C53-15	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	
	VDT-580R1A43-15	VDT-580R1C43-15	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	13.0	
	VDT-580R2A43-15	VDT-580R2C43-15	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	17.0	
	VDT-580R3A43-15	VDT-580R3C43-15	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	20.0	
	VDT-584O1A43-15	VDT-584O1C43-15	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	22.0	
	VDT-585Y1A43-15	VDT-585Y1C43-15	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	22.0	
1.90" High $\varnothing$ 5.0	VDT-586A45-19	VDT-586C45-19	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	10.0	DT-10
	VDT-583A45-19	VDT-583C45-19	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	10.0	
	VDT-583A55-19	VDT-583C55-19	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	15.0	
	VDT-580R1A45-19	VDT-580R1C45-19	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	18.0	
	VDT-580R2A45-19	VDT-580R2C45-19	GaAlAs/ SH/ Super Red	660	20	80 <td 30	150	1.7	2.5	25.0		
	VDT-580R3A45-19	VDT-580R3C45-19	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	23.0	
	VDT-584O1A45-19	VDT-584O1C45-19	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	25.0	
	VDT-585Y1A45-19	VDT-585Y1C45-19	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	25.0	



NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

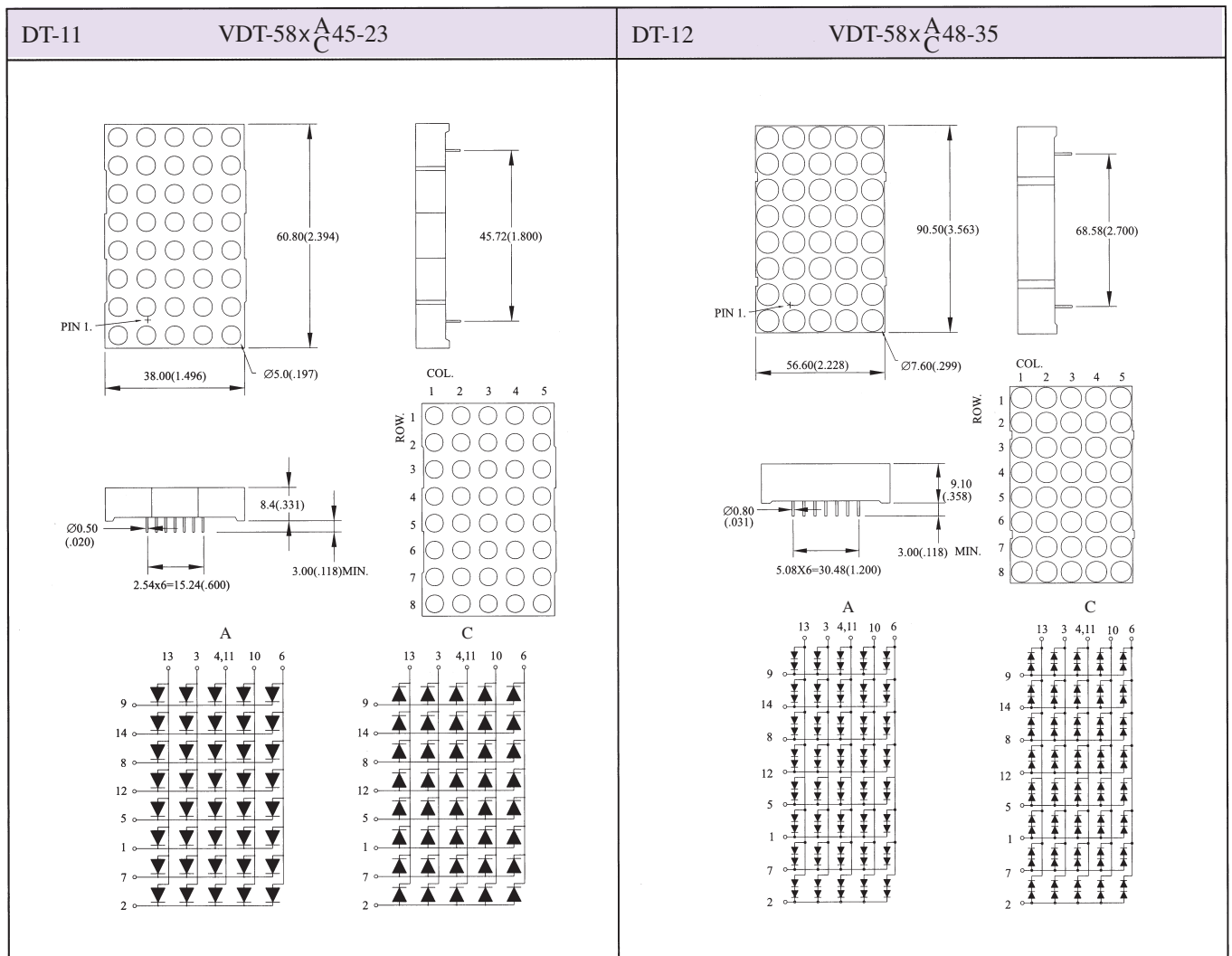
2.Tolerance is  $\pm 0.25\text{mm}(.010\text{'})$   
4.NP:No Pin. 5.NC:No Connect



# LED DOT MATRIX DISPLAY

## Single Color 5x8 Dot Matrix Displays

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv Typ. Per.Seg. (mcd)	
									Typ.	Max.		
2.30" High Ø5.0	VDT-586A45-23	VDT-586C45-23	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	10.0	DT-11
	VDT-583A45-23	VDT-583C45-23	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	10.0	
	VDT-583A55-23	VDT-583C55-23	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	15.0	
	VDT-580R1A45-23	VDT-580R1C45-23	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	18.0	
	VDT-580R2A45-23	VDT-580R2C45-23	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	25.0	
	VDT-580R3A45-23	VDT-580R3C45-23	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	23.0	
	VDT-584O1A45-23	VDT-584O1C45-23	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	25.0	
	VDT-585Y1A45-23	VDT-585Y1C45-23	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	25.0	
3.50" High Ø7.6	VDT-586A48-35	VDT-586C48-35	GaP/ GaP/ Yellow Green	568	30	160	30	150	4.2	5.0	12.0	DT-12
	VDT-583A48-35	VDT-583C48-35	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	12.0	
	VDT-583A58-35	VDT-583C58-35	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	16.0	
	VDT-580R1A48-35	VDT-580R1C48-35	GaAlAs/ SH/ Super Red	660	20	160	30	150	3.4	5.0	20.0	
	VDT-580R2A48-35	VDT-580R2C48-35	GaAlAs/ SH/ Super Red	660	20	160	30	150	3.4	5.0	25.0	
	VDT-580R3A48-35	VDT-580R3C48-35	GaAlAs/ DDH/ Super Red	660	20	160	30	150	4.0	5.0	25.0	
	VDT-584O1A48-35	VDT-584O1C48-35	AlGaInP/GaAs/ Ultra Orange	620	17	160	30	150	4.0	5.0	26.0	
	VDT-585Y1A48-35	VDT-585Y1C48-35	AlGaInP/GaAs/ Ultra Yellow	592	15	160	30	150	4.2	5.0	26.0	



NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

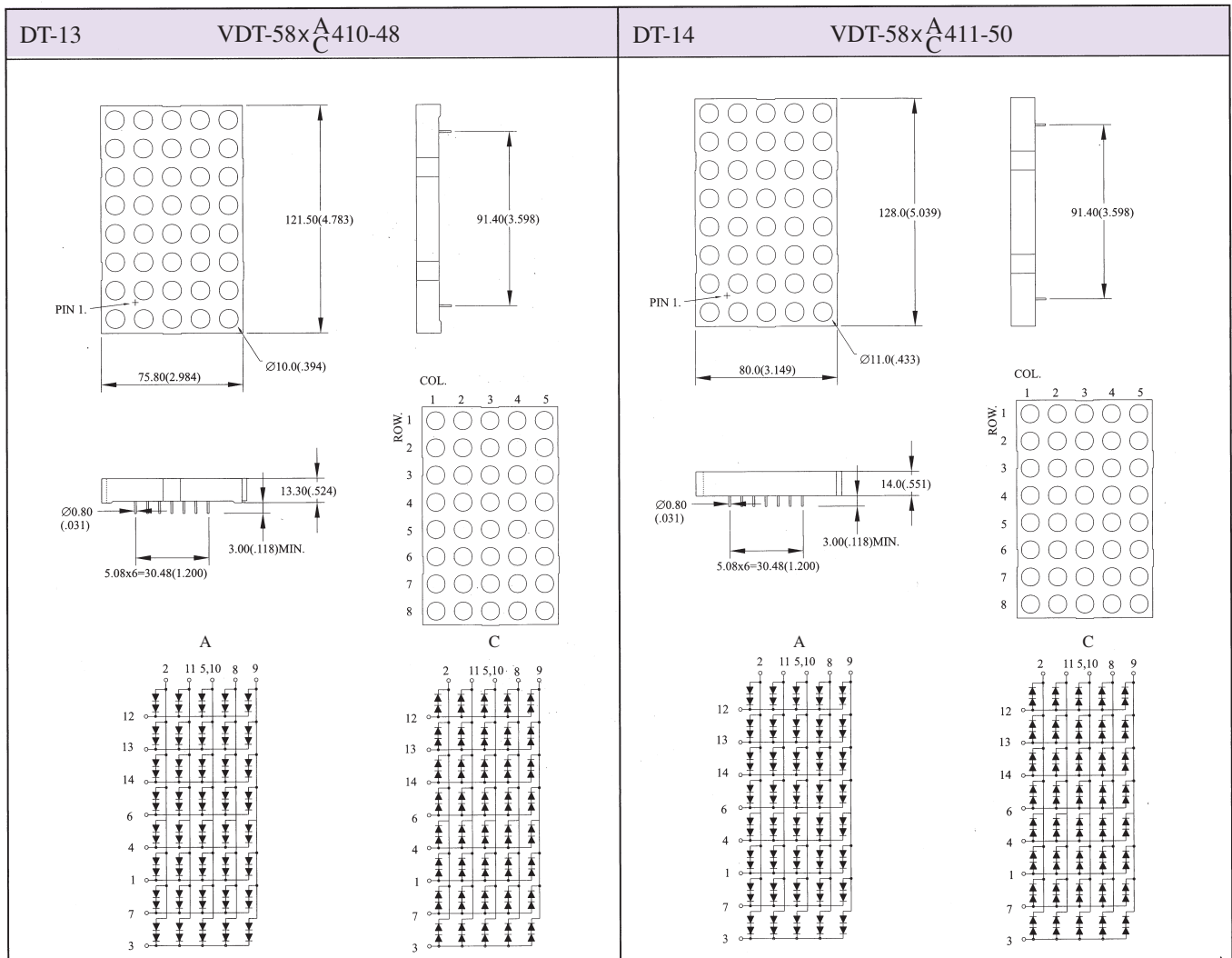
2.Tolerance is±0.25mm(.010")  
4.NP:No Pin. 5.NC:No Connect



# LED DOT MATRIX DISPLAY

## Single Color 5x8 Dot Matrix Displays

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda$ p(nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
4.78" High $\varnothing$ 10.0	VDT-586A410-48	VDT-586C410-48	GaP/ GaP/ Yellow Green	568	30	160	30	150	4.2	5.0	12.0	DT-13
	VDT-583A410-48	VDT-583C410-48	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	12.0	
	VDT-583A510-48	VDT-583C510-48	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	16.0	
	VDT-580R1A410-48	VDT-580R1C410-48	GaAlAs/ SH/ Super Red	660	20	160	30	150	3.4	5.0	20.0	
	VDT-580R2A410-48	VDT-580R2C410-48	GaAlAs/ SH/ Super Red	660	20	160	30	150	3.4	5.0	25.0	
	VDT-580R3A410-48	VDT-580R3C410-48	GaAlAs/ DDH/ Super Red	660	20	160	30	150	4.0	5.0	25.0	
	VDT-584O1A410-48	VDT-584O1C410-48	AlGaInP/GaAs/ Ultra Orange	620	17	160	30	150	4.0	5.0	26.0	
	VDT-585Y1A410-48	VDT-585Y1C410-48	AlGaInP/GaAs/ Ultra Yellow	592	15	160	30	150	4.2	5.0	26.0	
5.00" High $\varnothing$ 11.0	VDT-586A411-50	VDT-586C411-50	GaP/ GaP/ Yellow Green	568	30	160	30	150	4.2	5.0	12.0	DT-14
	VDT-583A411-50	VDT-583C411-50	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	12.0	
	VDT-583A511-50	VDT-583C511-50	GaAsP/GaP/ Hi-Eff.Red	635	45	160	30	150	4.0	5.0	16.0	
	VDT-580R1A411-50	VDT-580R1C411-50	GaAlAs/ SH/ Super Red	660	20	160	30	150	3.4	5.0	20.0	
	VDT-580R2A411-50	VDT-580R2C411-50	GaAlAs/ SH/ Super Red	660	20	160	30	150	3.4	5.0	25.0	
	VDT-580R3A411-50	VDT-580R3C411-50	GaAlAs/ DDH/ Super Red	660	20	160	30	150	4.0	5.0	25.0	
	VDT-584O1A411-50	VDT-584O1C411-50	AlGaInP/GaAs/ Ultra Orange	620	17	160	30	150	4.0	5.0	26.0	
	VDT-585Y1A411-50	VDT-585Y1C411-50	AlGaInP/GaAs/ Ultra Yellow	592	15	160	30	150	4.2	5.0	26.0	



NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

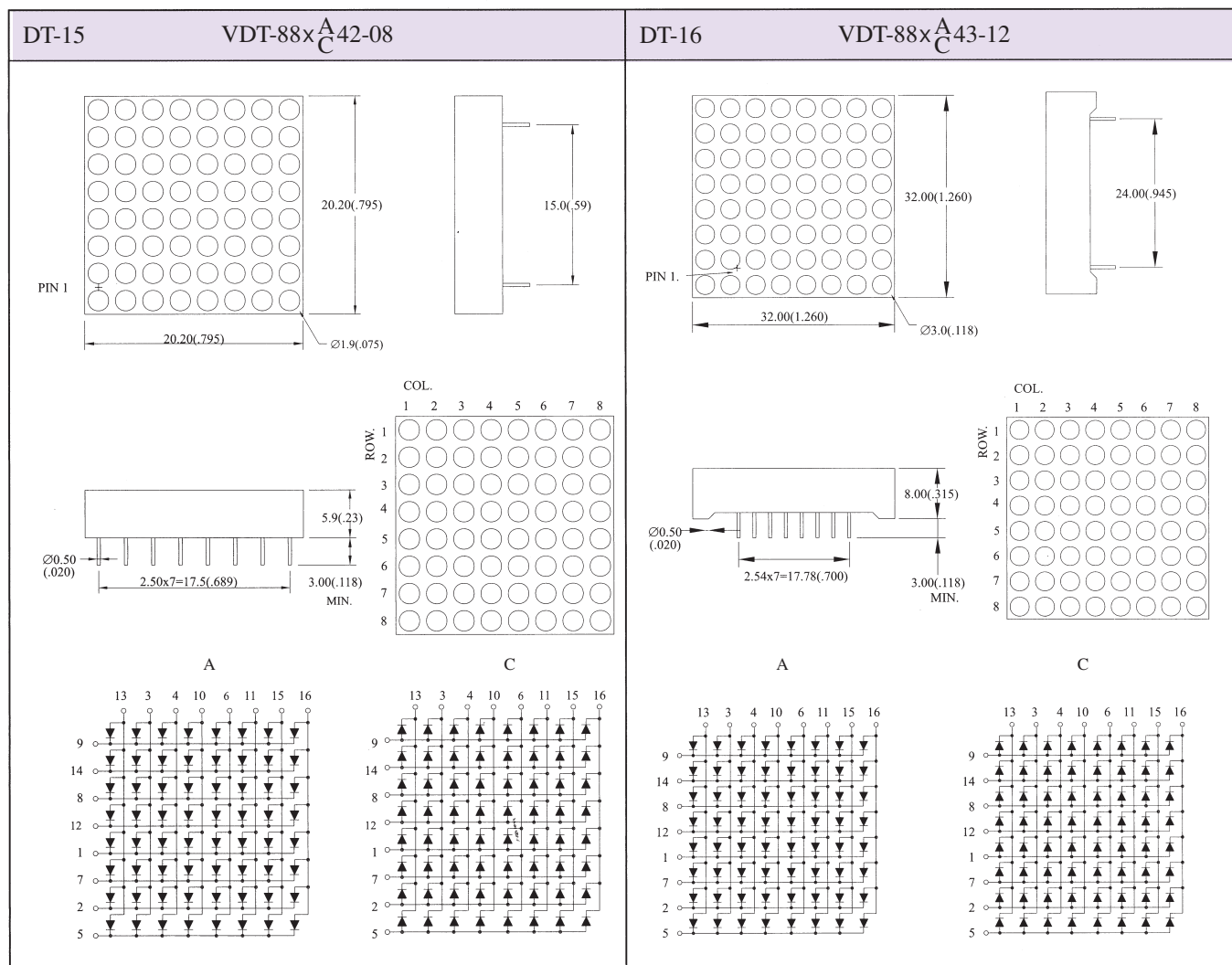
2.Tolerance is  $\pm 0.25\text{mm}(.010\text{'})$   
4.NP:No Pin. 5.NC:No Connect



# LED DOT MATRIX DISPLAY

## Single Color 8x8 Dot Matrix Displays

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.80" High $\varnothing$ 1.9	VDT-886A42-08	VDT-886C42-08	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	9.0	DT-15
	VDT-883A42-08	VDT-883C42-08	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	8.0	
	VDT-883A52-08	VDT-883C52-08	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	
	VDT-880R1A42-08	VDT-880R1C42-08	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	12.0	
	VDT-880R2A42-08	VDT-880R2C42-08	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	16.0	
	VDT-880R3A42-08	VDT-880R3C42-08	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	18.0	
	VDT-884O1A42-08	VDT-884O1C42-08	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	20.0	
	VDT-885Y1A42-08	VDT-885Y1C42-08	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	20.0	
1.20" High $\varnothing$ 3.0	VDT-886A43-12	VDT-886C43-12	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	12.0	DT-16
	VDT-883A43-12	VDT-883C43-12	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	
	VDT-883A53-12	VDT-883C53-12	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	14.0	
	VDT-880R1A43-12	VDT-880R1C43-12	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	14.0	
	VDT-880R2A43-12	VDT-880R2C43-12	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	18.0	
	VDT-880R3A43-12	VDT-880R3C43-12	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	20.0	
	VDT-884O1A43-12	VDT-884O1C43-12	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	22.0	
	VDT-885Y1A43-12	VDT-885Y1C43-12	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	22.0	



NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is $\pm$ 0.25mm(.010")  
4.NP:No Pin. 5.NC:No Connect

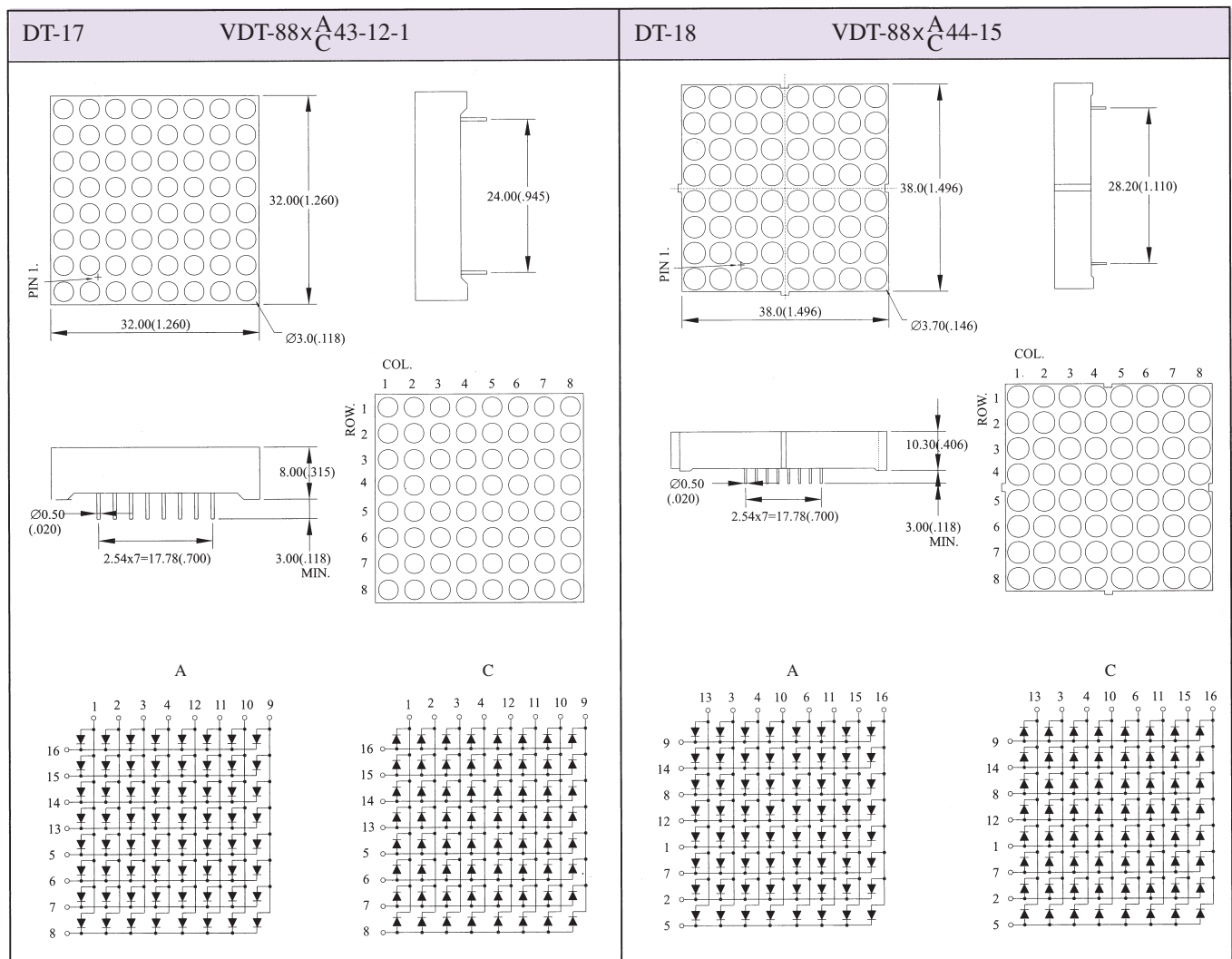




# LED DOT MATRIX DISPLAY

## Single Color 8x8 Dot Matrix Displays

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
1.20" High Ø3.0	VDT-886A43-12-1	VDT-886C43-12-1	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	9.0	DT-17
	VDT-883A43-12-1	VDT-883C43-12-1	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	
	VDT-883A53-12-1	VDT-883C53-12-1	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	14.0	
	VDT-880R1A43-12-1	VDT-880R1C43-12-1	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	14.0	
	VDT-880R2A43-12-1	VDT-880R2C43-12-1	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	18.0	
	VDT-880R3A43-12-1	VDT-880R3C43-12-1	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	20.0	
	VDT-880O1A43-12-1	VDT-884O1C43-12-1	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	22.0	
VDT-880Y1A43-12-1	VDT-885Y1C43-12-1	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	22.0		
1.50" High Ø3.7	VDT-886A44-15	VDT-886C44-15	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	10.0	DT-18
	VDT-883A44-15	VDT-883C44-15	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	10.0	
	VDT-883A54-15	VDT-883C54-15	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	15.0	
	VDT-880R1A44-15	VDT-880R1C44-15	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	15.0	
	VDT-880R2A44-15	VDT-880R2C44-15	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	19.0	
	VDT-880R3A44-15	VDT-880R3C44-15	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	21.0	
	VDT-884O1A44-15	VDT-884O1C44-15	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	23.0	
VDT-885Y1A44-15	VDT-885Y1C44-15	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	23.0		



NOTES: 1.ALL Dimensions are in millimeters(inches).

3.Specifications are subject to change without notice.

2.Tolerance is $\pm 0.25$ mm(.010")

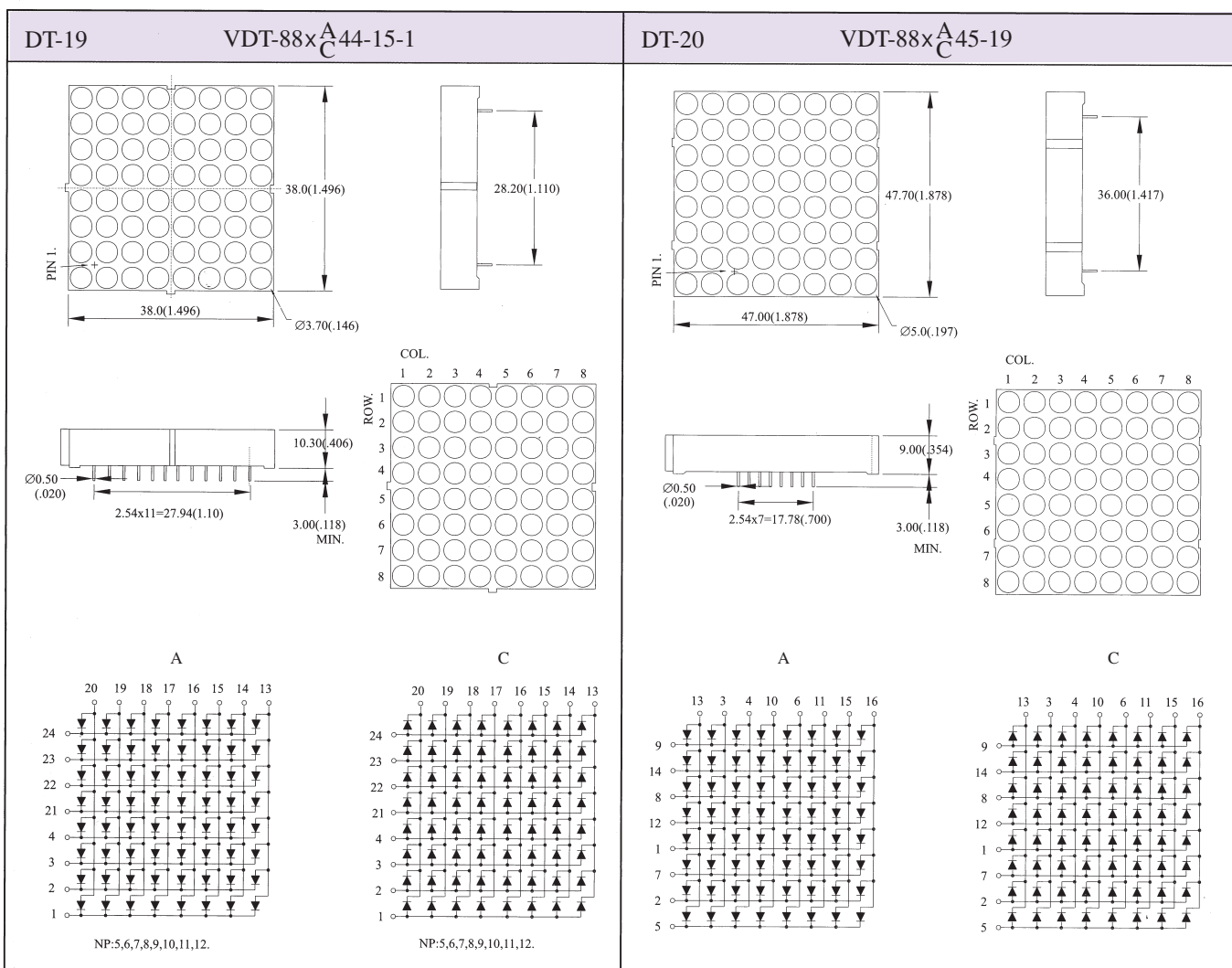
4.NP:No Pin. 5.NC:No Connect



# LED DOT MATRIX DISPLAY

## Single Color 8x8 Dot Matrix Displays

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
1.50" High $\varnothing 3.7$	VDT-886A44-15-1	VDT-886C44-15-1	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	10.0	DT-19
	VDT-883A44-15-1	VDT-883C44-15-1	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	10.0	
	VDT-883A54-15-1	VDT-883C54-15-1	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	15.0	
	VDT-880R1A44-15-1	VDT-880R1C44-15-1	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	15.0	
	VDT-880R2A44-15-1	VDT-880R2C44-15-1	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	19.0	
	VDT-880R3A44-15-1	VDT-880R3C44-15-1	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	21.0	
	VDT-884O1A44-15-1	VDT-884O1C44-15-1	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	23.0	
	VDT-885Y1A44-15-1	VDT-885Y1C44-15-1	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	23.0	
1.90" High $\varnothing 5.0$	VDT-886A45-19	VDT-886C45-19	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	12.0	DT-20
	VDT-883A45-19	VDT-883C45-19	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	
	VDT-883A55-19	VDT-883C55-19	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	17.0	
	VDT-880R1A45-19	VDT-880R1C45-19	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	17.0	
	VDT-880R2A45-19	VDT-880R2C45-19	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	21.0	
	VDT-880R3A45-19	VDT-880R3C45-19	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	23.0	
	VDT-884O1A45-19	VDT-884O1C45-19	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	25.0	
	VDT-885Y1A45-19	VDT-885Y1C45-19	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	25.0	



NOTES: 1.ALL Dimensions are in millimeters(inches).

3.Specifications are subject to change without notice.

2.Tolerance is  $\pm 0.25\text{mm}(0.010\text{'})$

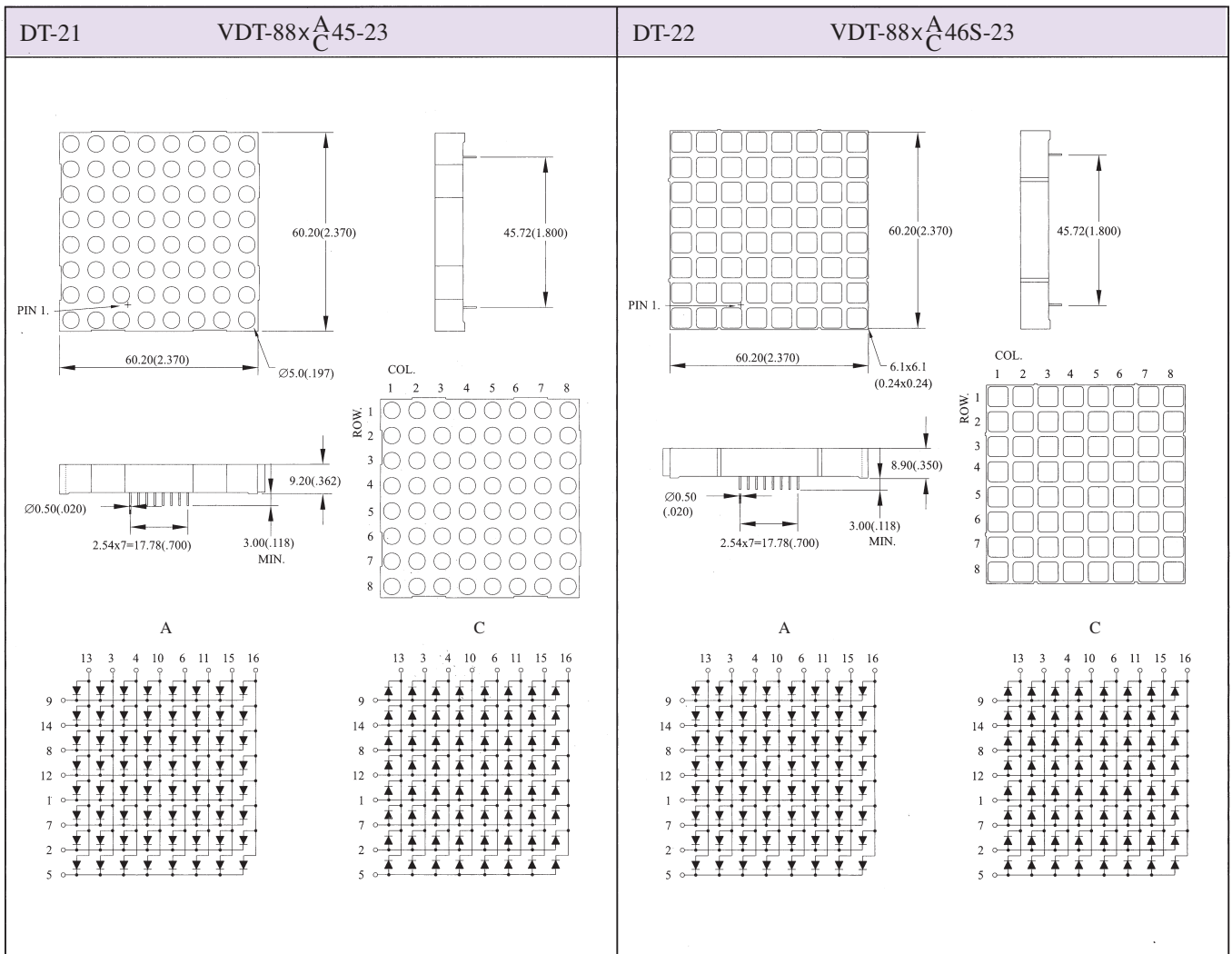
4.NP:No Pin. 5.NC:No Connect



# LED DOT MATRIX DISPLAY

## Single Color 8x8 Dot Matrix Displays

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
2.30" High $\varnothing$ 5.0	VDT-886A45-23	VDT-886C45-23	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	12.0	DT-21
	VDT-883A45-23	VDT-883C45-23	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	
	VDT-883A55-23	VDT-883C55-23	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	17.0	
	VDT-880R1A45-23	VDT-880R1C45-23	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	17.0	
	VDT-880R2A45-23	VDT-880R2C45-23	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	21.0	
	VDT-880R3A45-23	VDT-880R3C45-23	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	23.0	
	VDT-884O1A45-23	VDT-884O1C45-23	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	25.0	
	VDT-885Y1A45-23	VDT-885Y1C45-23	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	25.0	
2.3" High 6.1x6.1	VDT-886A46S-23	VDT-886C46S-23	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	12.0	DT-22
	VDT-883A46S-23	VDT-883C46S-23	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	
	VDT-883A56S-23	VDT-883C56S-23	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	17.0	
	VDT-880R1A46S-23	VDT-880R1C46S-23	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	17.0	
	VDT-880R2A46S-23	VDT-880R2C46S-23	GaAlAs/ SH/ Super Red	660	20	80	30	150	1.7	2.5	21.0	
	VDT-880R3A46S-23	VDT-880R3C46S-23	GaAlAs/ DDH/ Super Red	660	20	80	30	150	2.0	2.5	23.0	
	VDT-884O1A46S-23	VDT-884O1C46S-23	AlGaInP/GaAs/ Ultra Orange	620	17	80	30	150	2.0	2.5	25.0	
	VDT-885Y1A46S-23	VDT-885Y1C46S-23	AlGaInP/GaAs/ Ultra Yellow	592	15	80	30	150	2.1	2.5	25.0	



NOTES: 1.ALL Dimensions are in millimeters(inches).

3.Specifications are subject to change without notice.

2.Tolerance is $\pm 0.25$ mm(.010")

4.NP:No Pin. 5.NC:No Connect



# LED DOT MATRIX DISPLAY

## Multi- Color 5x7 Dot Matrix Displays

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.70" High Ø1.90	VDT-5736A42-07	VDT-5736C42-07	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	8.0	DT-23
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	8.0	
1.20" High Ø3.00	VDT-5736A43-12	VDT-5736C43-12	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	DT-24
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	9.0	

DT-23 VDT-57x $\times$ $\overset{A}{C}$ 42-07	DT-24 VDT-57x $\times$ $\overset{A}{C}$ 43-12
<div style="text-align: center; margin-top: 10px;"> <p>COL. 1 2 3 4 5</p> <p>ROW. 1 2 3 4 5 6 7</p> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <p><b>A</b></p> <p>GREEN NP: 4 ORANGE</p> </div> <div style="text-align: center;"> <p><b>C</b></p> <p>GREEN NP: 4 ORANGE</p> </div> </div>	<div style="text-align: center; margin-top: 10px;"> <p>COL. 1 2 3 4 5</p> <p>ROW. 1 2 3 4 5 6 7</p> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <p><b>A</b></p> <p>GREEN NC: 9 ORANGE</p> </div> <div style="text-align: center;"> <p><b>C</b></p> <p>GREEN NC: 9 ORANGE</p> </div> </div>

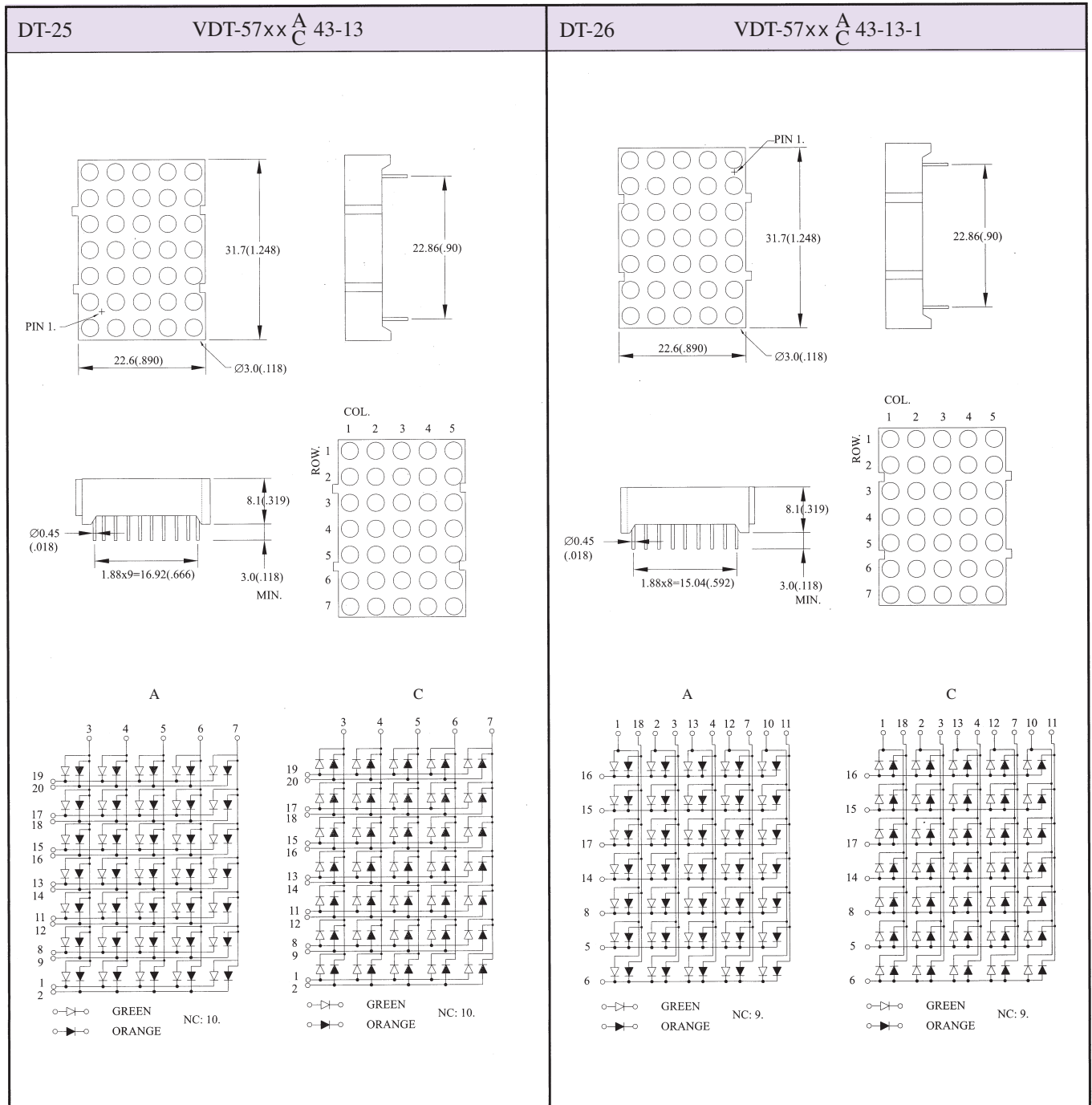
NOTES: 1.ALL Dimensions are in millimeters(.inches).  
 2.Tolerance is $\pm$ 0.25mm(.010")  
 3.Specifications are subject to change without notice.  
 4.NP:No Pin. 5.NC:No Connect



# LED DOT MATRIX DISPLAY

## Multi- Color 5x7 Dot Matrix Displays

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mW)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
1.25" High Ø3.00	VDT-5736A43-13	VDT-5736C43-13	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	DT-25
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	9.0	
1.25" High Ø3.00	VDT-5736A43-13-1	VDT-5736C43-13-1	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	DT-26
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	9.0	



NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is $\pm 0.25$ mm(.010")  
4.NP:No Pin. 5.NC:No Connect





# LED DOT MATRIX DISPLAY

## Multi- Color 5x7 Dot Matrix Displays

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
2.10" High Ø5.00	VDT-5736A45-21	VDT-5736C45-21	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	DT-23
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	12.0	
4.00" High Ø10.0	VDT-5736A410-40	VDT-5736C410-40	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	15.0	DT-24
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	15.0	

DT-27 VDT-57x <sup>A</sup> <sub>C</sub> 45-21	DT-28 VDT-57x <sup>A</sup> <sub>C</sub> 410-40
<div style="text-align: center; margin-top: 10px;"> <p>COL. 1 2 3 4 5</p> <p>ROW. 1 2 3 4 5 6 7</p> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <p><b>A</b></p> <p>○-▷-○ GREEN ○-▷-○ ORANGE NC: 9.</p> </div> <div style="text-align: center;"> <p><b>C</b></p> <p>○-▷-○ GREEN ○-▷-○ ORANGE NC: 9.</p> </div> </div>	<div style="text-align: center; margin-top: 10px;"> <p>COL. 1 2 3 4 5</p> <p>ROW. 1 2 3 4 5 6 7</p> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <p><b>A</b></p> <p>○-▷-○ GREEN NP: 9. ○-▷-○ ORANGE</p> </div> <div style="text-align: center;"> <p><b>C</b></p> <p>○-▷-○ GREEN NP: 9. ○-▷-○ ORANGE</p> </div> </div>

NOTES: 1.ALL Dimensions are in millimeters(inches).  
 2.Tolerance is±0.25mm(.010")  
 3.Specifications are subject to change without notice.  
 4.NP:No Pin. 5.NC:No Connect



# LED DOT MATRIX DISPLAY

## Multi- Color 5x7 & 5x8 Dot Matrix Displays

Digit Size	Part No.		Chip	Absolute Maximum Ratings					Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode		Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		
			Typ.							Max.		
4.00" High 12x12	VDT-5736A412S-40	VDT-5736C412S-40	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	15.0	DT-29
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	15.0	
1.4" High Ø3.00	VDT-5836A43-14	VDT-5836C43-14	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	9.0	DT-30
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	9.0	

DT-29 VDT-57x $\times$ $\frac{A}{C}$ 412S-40	DT-30 VDT-58x $\times$ $\frac{A}{C}$ 43-14
<div style="text-align: center; margin-top: 10px;"> <p>COL. 1 2 3 4 5</p> <p>ROW. 1 2 3 4 5 6 7</p> </div> <div style="text-align: center; margin-top: 10px;"> <p>A</p> <p>1 182 313412 71011</p> <p>16 15 17 14 8 5 6</p> <p>○→ GREEN NP: 9 ○→ ORANGE</p> </div> <div style="text-align: center; margin-top: 10px;"> <p>C</p> <p>1 182 313412 71011</p> <p>16 15 17 14 8 5 6</p> <p>○→ GREEN NP: 9 ○→ ORANGE</p> </div>	<div style="text-align: center; margin-top: 10px;"> <p>COL. 1 2 3 4 5</p> <p>ROW. 1 2 3 4 5 6 7 8</p> </div> <div style="text-align: center; margin-top: 10px;"> <p>A</p> <p>3 4 5 6 7</p> <p>2 1 22 21 20 19 18 17 16 15 14 13 12 11 10 9</p> <p>○→ GREEN NP: 8 ○→ ORANGE</p> </div> <div style="text-align: center; margin-top: 10px;"> <p>C</p> <p>3 4 5 6 7</p> <p>2 1 22 21 20 19 18 17 16 15 14 13 12 11 10 9</p> <p>○→ GREEN NP: 8 ○→ ORANGE</p> </div>

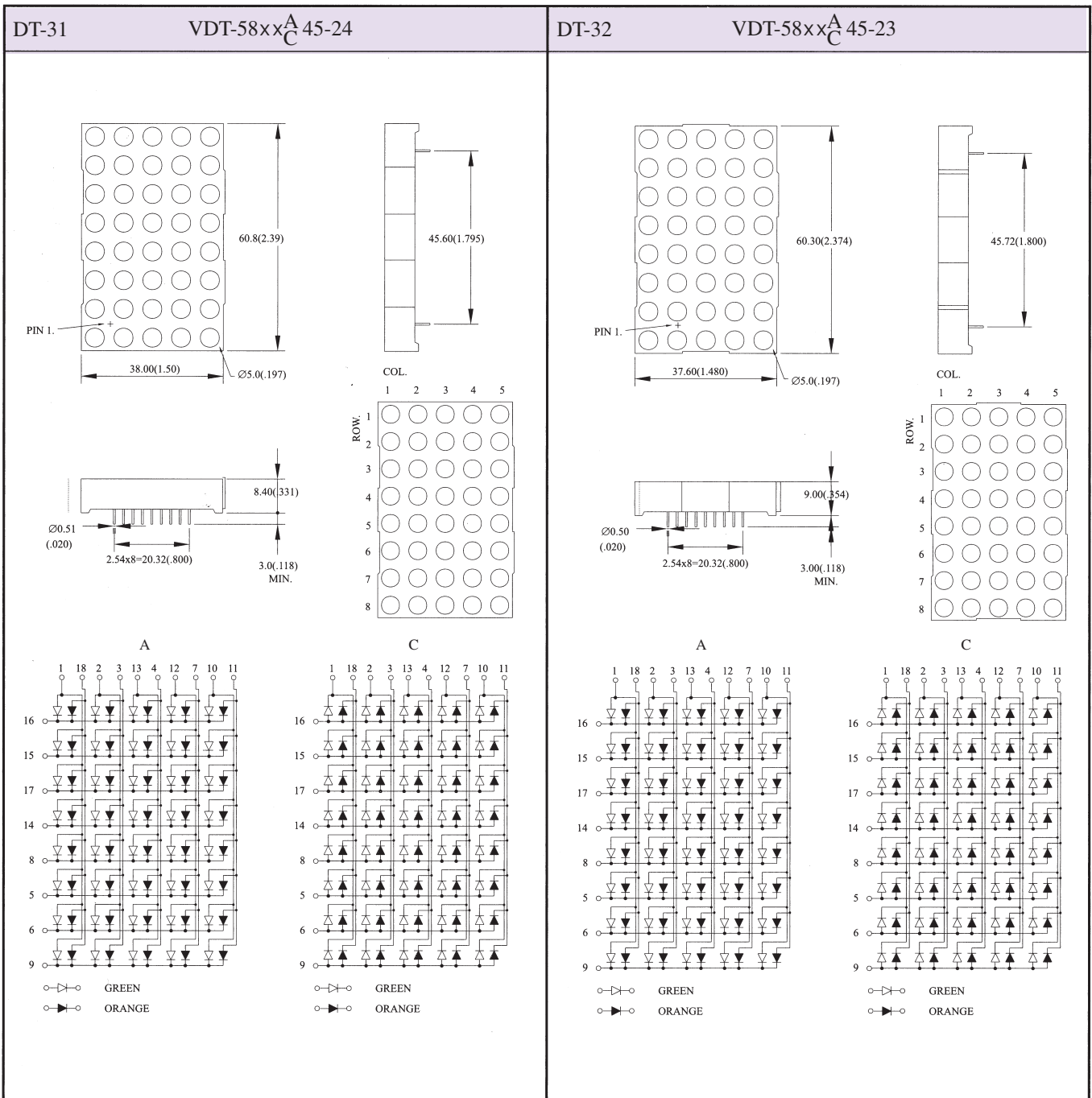
NOTES: 1.ALL Dimensions are in millimeters(.inches).  
 2.Tolerance is±0.25mm(.010")  
 3.Specifications are subject to change without notice.  
 4.NP:No Pin. 5.NC:No Connect



# LED DOT MATRIX DISPLAY

## Multi- Color 5x8 Dot Matrix Displays

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
2.40" High Ø5.00	VDT-5836A45-24	VDT-5836C45-24	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	DT-31
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	12.0	
2.37" High Ø5.00	VDT-5836A45-23	VDT-5836C45-23	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	DT-32
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	12.0	



NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

2.Tolerance is $\pm 0.25$ mm(.010")  
4.NP:No Pin. 5.NC:No Connect



# LED DOT MATRIX DISPLAY

## Multi- Color 5x8 Dot Matrix Displays

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
1.90" High Ø5.00	VDT-5836A45-19	VDT-5836C45-19	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	12.0	DT-33
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	12.0	
3.50" High Ø 7.60	VDT-5836A48-35	VDT-5836C48-35	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	15.0	DT-34
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	15.0	

DT-33 VDT-58x $\times$ $\frac{A}{C}$ 45-19	DT-34 VDT-58x $\times$ $\frac{A}{C}$ 48-35

NOTES: 1.ALL Dimensions are in millimeters( inches).  
 3.Specifications are subject to change without notice.

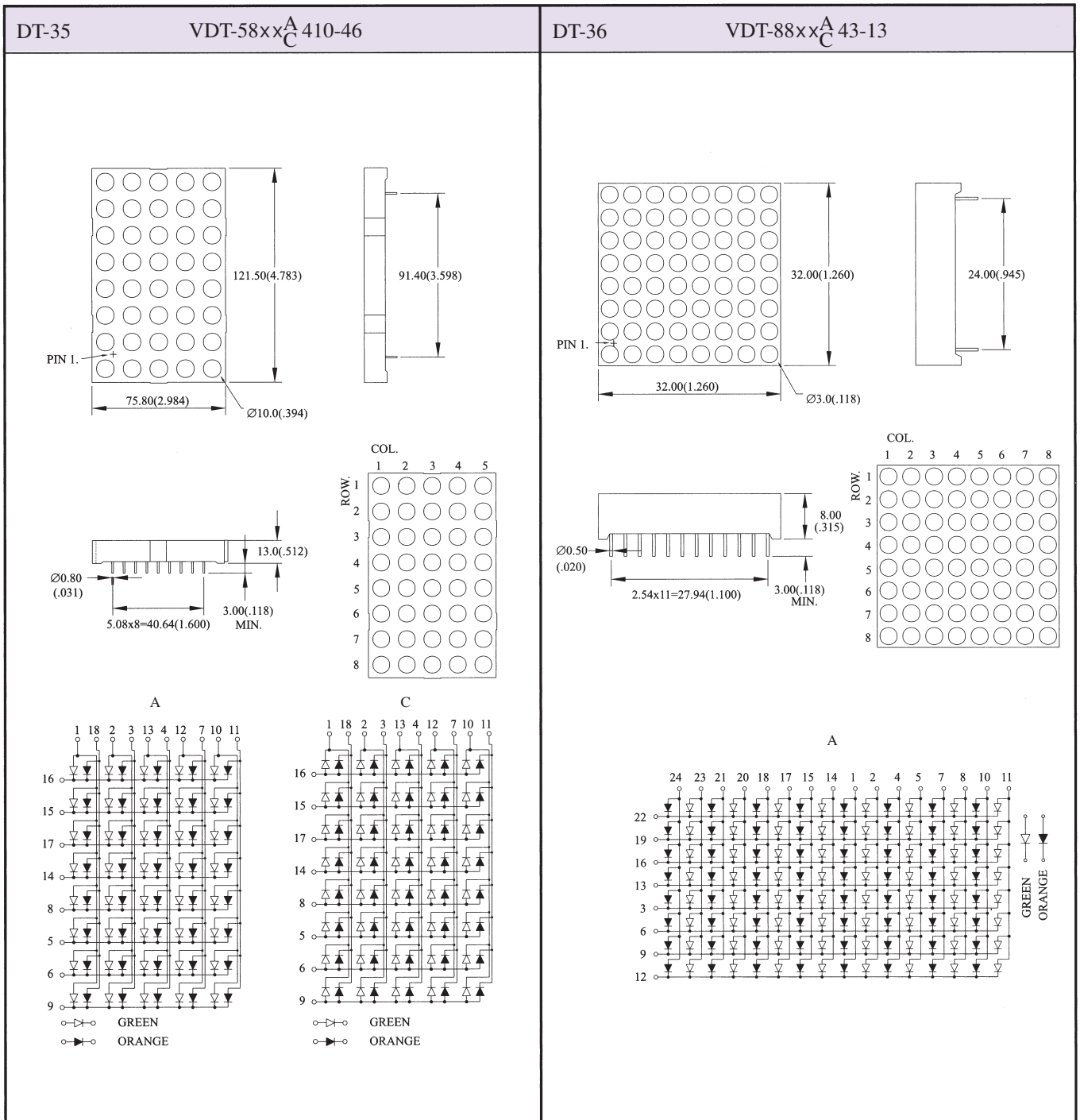
2.Tolerance is  $\pm 0.25$ mm(.010")  
 4.NP:No Pin. 5.NC:No Connect



# LED DOT MATRIX DISPLAY

## Multi- Color 5x8 & 8x8 Dot Matrix Displays

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
4.60" High Ø 10.0	VDT-5836A410-46	VDT-5836C410-46	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	15.0	DT-35
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	15.0	
1.25" High Ø 3.00	VDT-8836A43-13	VDT-8836C43-13	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	10.0	DT-36
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	10.0	



NOTES: 1. ALL Dimensions are in millimeters(inches).  
 2. Tolerance is  $\pm 0.25$ mm(.010")  
 3. Specifications are subject to change without notice.  
 4. NP: No Pin. 5. NC: No Connect

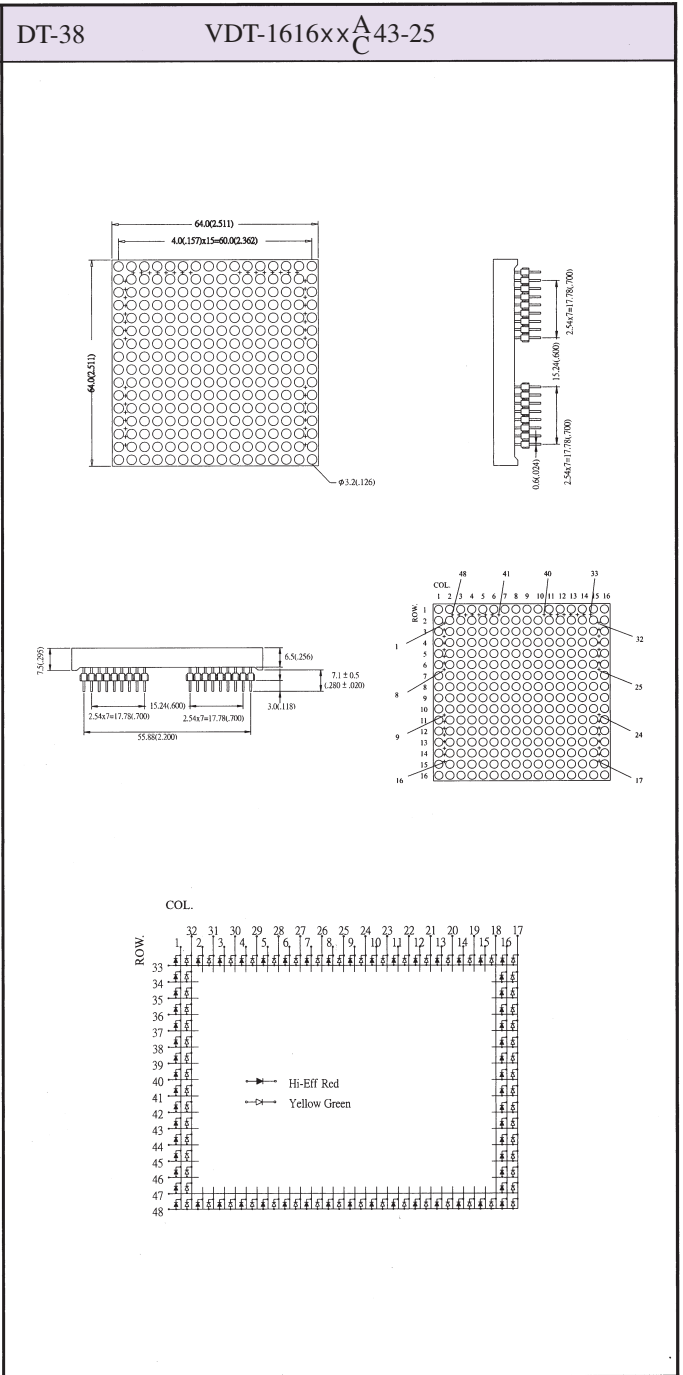
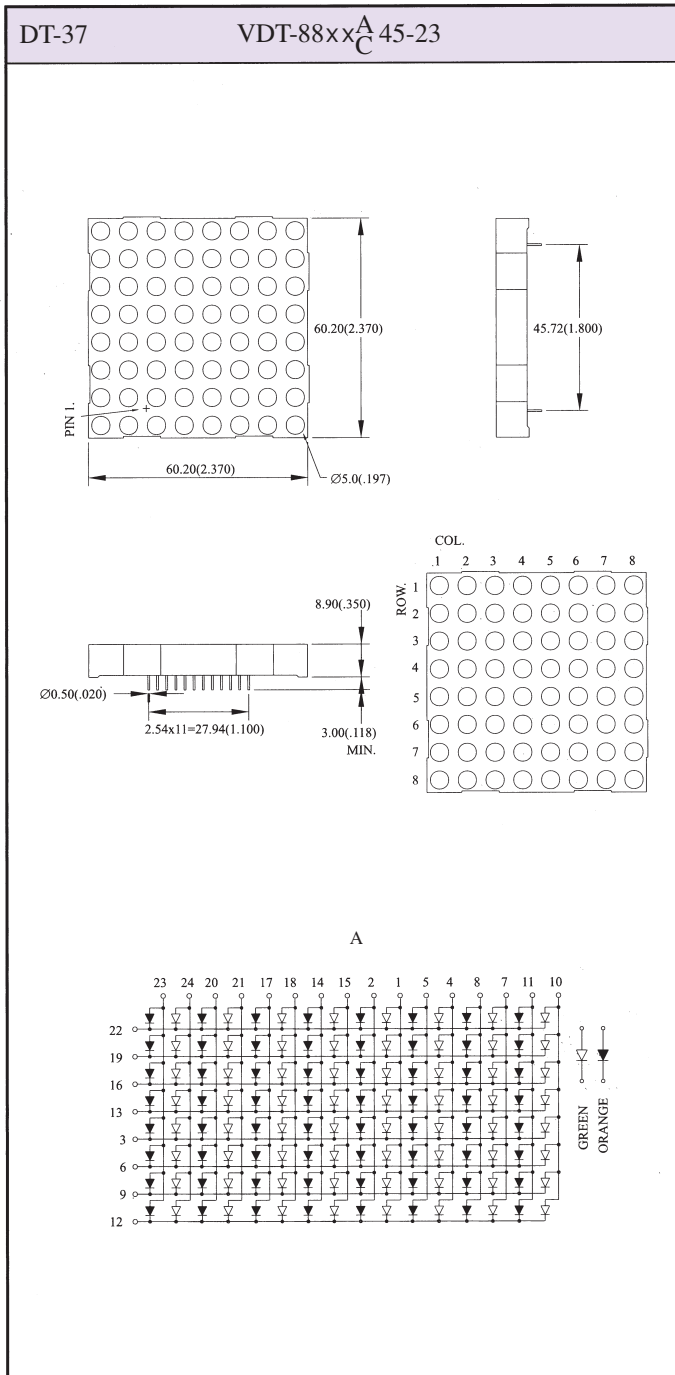




# LED DOT MATRIX DISPLAY

## Multi- Color 8x8 & 16x16 Dot Matrix Displays

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	I <sub>fp</sub> (mA)	V <sub>f</sub> (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
2.30" High Ø 5.0	VDT-8836A45-23	VDT-8836C45-23	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	15.0	DT-37
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	15.0	
2.50" High Ø 3.0	VDT-161636A43-25	VDT-161636C43-25	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	8.0	DT-38
			GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	8.0	



NOTES: 1.ALL Dimensions are in millimeters(inches).  
3.Specifications are subject to change without notice.

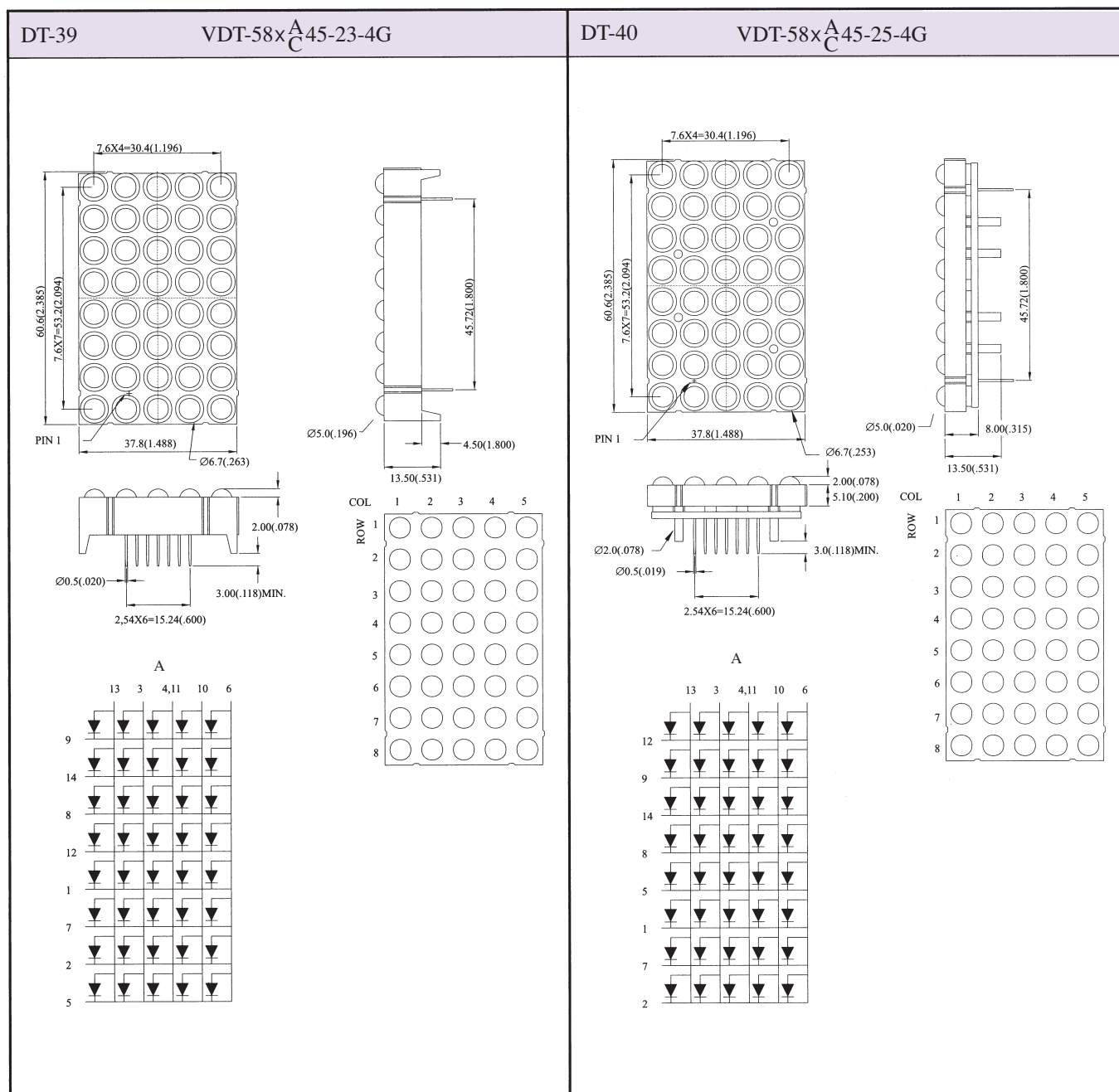
2.Tolerance is±0.25mm(.010")  
4.NP:No Pin. 5.NC:No Connect



# LED DOT MATRIX DISPLAY

## Single- Color 5x8 Dot Matrix Displays

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Column Common Anode	Column Common Cathode	Material/Emitted Color	Peak Wave Length $\lambda_p$ (nm)	$\Delta \lambda$ (nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
2.30" High $\varnothing 5.0$	VDT-583A45-23-4G	VDT-583C45-23-4G	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	200	DT-39
	VDT-586A45-23-4G	VDT-586C45-23-4G	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	200	
	VDT-580R3A45-23-4G	VDT-580R3C45-23-4G	GaAlAs/DH / Super Red	660	20	80	30	150	1.7	2.5	450	
	VDT-580R4A45-23-4G	VDT-580R4C45-23-4G	GaAlAs/DDH /Super Red	660	20	80	30	150	2.0	2.5	800	
2.50" High $\varnothing 5.0$	VDT-583A45-25-4G	VDT-583C45-25-4G	GaAsP/GaP/ Hi-Eff.Red	635	45	80	30	150	2.0	2.5	200	DT-40
	VDT-586A45-25-4G	VDT-586C45-25-4G	GaP/ GaP/ Yellow Green	568	30	80	30	150	2.1	2.5	200	
	VDT-580R3A45-25-4G	VDT-580R3C45-25-4G	GaAlAs/DH / Super Red	660	20	80	30	150	1.7	2.5	450	
	VDT-580R4A45-25-4G	VDT-580R4C45-25-4G	GaAlAs/DDH /Super Red	660	20	80	30	150	2.0	2.5	800	



NOTES: 1.ALL Dimensions are in millimeters(inches).  
 2.Tolerance is  $\pm 0.25\text{mm}(.010")$   
 3.Specifications are subject to change without notice.  
 4.NP:No Pin. 5.NC:No Connect



# LED CLOCK DISPLAY

(1) (2) (3) (4) (5) (6)  
 VXX -

↘  
 VINCENC HOME DEVELOPMENT CO., LTD.

- (1) PRODUCT TYPE → → → (1) CD : LED CLOCK DISPLAY
- (2) SIZE
- (3) EMITTING COLOR
- (4) DRIVING CIRCUIT
- (5) SURFACE COLOR & SEGMENT COLOR COMBINATION
- (6) DISPLAY FONT :

(2) SIZE :  
 60 : 0.6" HIGH      90 : 0.9" HIGH  
 180 : 1.8" HIGH      250 : 2.5" HIGH

(3) EMITTING COLOR :  
 2 : GaP 700nm / Bright Red  
 3 : GaAsp/GaP 635nm / Hi-Eff Red  
 6 : GaP/Gap 568nm / Yellow Green

(4) DRIVING CIRCUIT :  
 A: Direct Drive, Common Anode  
 C: Direct Drive, Common Cathode  
 E : Duplex Drive, Common Anode  
 F : Duplex Drive, Common Cathode  
 M : Multiplex Drive, Common Anode  
 N : Multiplex Drive, Common Cathode

(5) SURFACE COLOR & SEGMENT COLOR COMBINATION :  
 1 : With Cap  
 2 : With White Diffused Film  
 3 : With Color Diffused Film

(6) DISPLAY FONT :  
 1 : 12 Hours  
 2 : 24 Hours



# LED CLOCK DISPLAY

Digit Size	Part No.		Chip		Absolute Maximum Ratings				Electro-optical Data(At 10mA)			Drawing No.
	Common Anode	Common Cathode	Material/Emitted Color	Peak Wave Length p(nm)	(nm)	Pd (mw)	If (mA)	Ifp (mA)	Vf (v)		Iv. Typ. Per.Seg. (mcd)	
									Typ.	Max.		
0.60" High	VCD-602M32	VCD-602N32	GaP/GaP / Bright Red	700	90	40	15	50	2.0	2.5	1.5	CD-01
	VCD-604M32	VCD-604N32	GaAsP/GaP / Orange	635	45	80	30	150	1.9	2.5	3.5	
	VCD-606M32	VCD-606N32	GaP/GaP / Green	568	30	80	30	150	2.0	2.5	3.5	
0.90" High	VCD-902E32	VCD-902F32	GaP/GaP / Bright Red	700	90	40	15	50	2.0	2.5	1.5	CD-02
	VCD-904E32	VCD-904F32	GaAsP/GaP / Orange	635	45	80	30	150	1.9	2.5	3.5	
	VCD-906E32	VCD-906F32	GaP/GaP / Green	568	30	80	30	150	2.0	2.5	3.5	
1.80" High	VCD-1802E32	VCD-1802F32	GaP/GaP / Bright Red	700	90	80	15	50	4.0	5.0	2.5	CD-03
	VCD-1804E32	VCD-1804F32	GaAsP/GaP / Orange	635	45	160	30	150	3.8	5.0	5.0	
	VCD-1806E32	VCD-1806F32	GaP/GaP / Green	568	30	160	30	150	4.0	5.0	5.0	
2.50" High	VCD-2502A32	VCD-2502C32	GaP/GaP / Bright Red	700	90	120	15	50	6.0	7.5	3.5	CD-04
	VCD-2504A32	VCD-2504C32	GaAsP/GaP / Orange	635	45	240	30	150	5.7	7.5	6.0	
	VCD-2506A32	VCD-2506C32	GaP/GaP / Green	568	30	240	30	150	6.0	7.5	6.0	

<p><b>CD-01</b>      <b>VCD-60x<sup>M</sup><sub>N</sub>32</b></p> <p>Dimensions: 84.50(3.327), 72.00(2.835), 92.00(3.622), 6.00(0.236), 15.00(0.590), 25.40(1.00), 19.00(0.748), 2.2(.087), 1.60(.063), 3.20(0.126), 0.70(0.027) SQ., 3.30(0.130), 9.00(0.354)TYP.</p> <p>Pin connections: PM, AM, D1, D2, D3, D4, A, B, C, D, E, F, G, d1, d2, d3, d4.</p> <p>NP: 12,13,14,15,16,17,18,19,20,21.</p>	<p><b>CD-02</b>      <b>VCD-90x<sup>F</sup><sub>F</sub>32</b></p> <p>Dimensions: 90.50(3.563), 8.00(.314), 23.00(.900), 24.30(.957), 27.00(1.063), 1.60(.063), 2.54x29=73.66(2.900), 105.00(4.134).</p> <p>Pin connections: PM, AM, D1, D2, D3, D4, A, B, C, D, E, F, G, d1, d2, d3, d4, d5.</p> <p>NC: 11,14,22,23,24,25.</p>
<p><b>CD-03</b>      <b>VCD-180x<sup>E</sup><sub>F</sub>32</b></p> <p>Dimensions: 174.00(6.850), 9.50(.374), 46.60(1.835), 40.00(1.575), 50.00(1.969), 56.20(2.213), 1.60(.063), 2.54x29=73.66(2.900), 160.0(6.299).</p> <p>Pin connections: PM, AM, D1, D2, D3, D4, A, B, C, D, E, F, G, d1, d2, d3, d4, d5.</p> <p>NC: 11,14,22,23,24,25.</p>	<p><b>CD-04</b>      <b>VCD-250x<sup>A</sup><sub>C</sub>32</b></p> <p>Dimensions: 205.00(8.071), 10.50(.413), 63.40(2.500), 74.00(2.913), 2.54x36=91.44(3.600), 217.00(8.543).</p> <p>Pin connections: PM, AM, D1, D2, D3, D4, A, B, C, D, E, F, G, d1, d2, d3, d4, d5, d6.</p> <p>NC: 2,37.</p>

NOTES: 1.ALL Dimensions are in millimeters(inches).  
 3.Specifications are subject to change without notice.

2.Tolerance is±0.25mm(.010")  
 4.NP:No Pin.    5.NC:No Connect