



## 2100 SERIES

# STRIPSWITCH® PRINTED CIRCUIT BOARD SWITCHES

*The 2100 Series STRIPSWITCH® is a PCB mounted thumbwheel switch, combining direct decimal to binary conversion in a compact, easy to use package.*

The 2100 Series may be configured in assemblies of one to four switches on a single terminal strip, reducing assembly time and cost. Each switch may be a different code. The 2100 Series offers 10 legend locations, screwdriver or thumbwheel adjust, and two optional extended shafts to accommodate any design specification. The 2100 Series offers a wide variety of 10 and 16 position binary and decimal codes. Other 2100 Series features include stop pins and special rotor markings to create a customized yet low cost operator interface. The 2100 Series is covered by EECO's exclusive **Lifetime Warranty**. All 2100 Series products are **Lead-Free** and fully **RoHS compliant**.



## SPECIFICATIONS

### MECHANICAL

No. of Switching Positions	10 16
Life	250,000 Detents at +25°C
Rotational Torque (Initial)	1.0 - 4.0 Inch/Ounces
Weight	.170 Oz. (4.8 Gr.)

### ELECTRICAL

Maximum Electrical Current, Non-Switching	3A
Maximum Rated Load, Switching	125 mA at 28 VDC Resistive
Switch Circuit Resistance	100 mΩ Maximum 220 mΩ Maximum After Life
Insulation Resistance	1,000 MΩ Minimum At 100 VDC
Dielectric Withstanding Voltage	250 VAC (RMS)

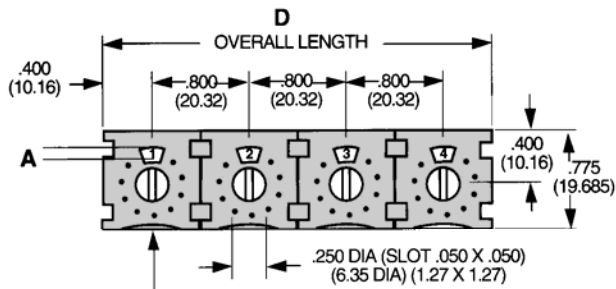
### ENVIRONMENTAL

Storage Temperature	-40°C To +100°C
Operating Temperature	-20°C To +75°C

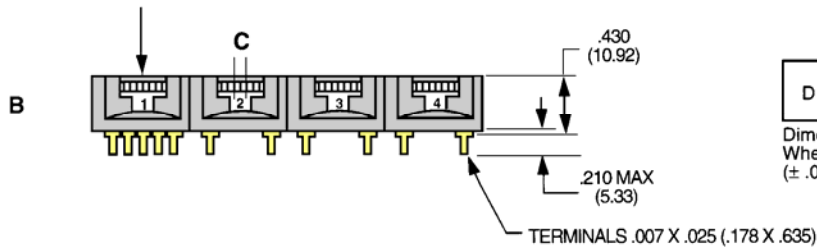
### MATERIALS

Housing and Thumbwheel	Glass Reinforced Polyester, UL 94 V0
Terminal Board	Glass Reinforced 6/6 Nylon UL 94 V0
Contact	Copper Alloy Base, Gold Over Nickel Plate
Terminal	Matte Tin With Whisker Inhibitors Over Nickel Plate
Weight	0.03 Oz (.86G)
Circuit Disc	
Base Material	Glass Epoxy Laminate
Plating	Gold Over Nickel Plate

# OUTLINE DIMENSIONS



Station "1" is always the leftmost switch when viewing the assembly as indicated.



## CHARACTER HEIGHT

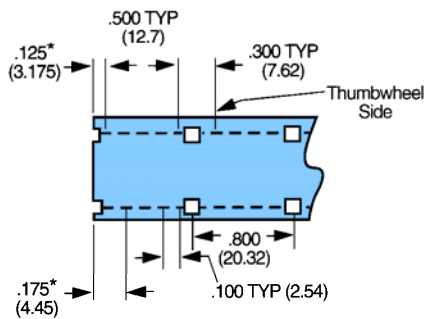
DIMENSION	10 POSITION	16 POSITION
A	.125 (3.18)	.085 (2.16)
B	.125 (3.18)	.085 (2.16)
C	.140 (3.56)	.085 (2.16)

## NUMBER STATIONS

	1	2	3	4
D	.80 (20.32)	1.60 (40.64)	2.40 (60.96)	3.20 (81.28)

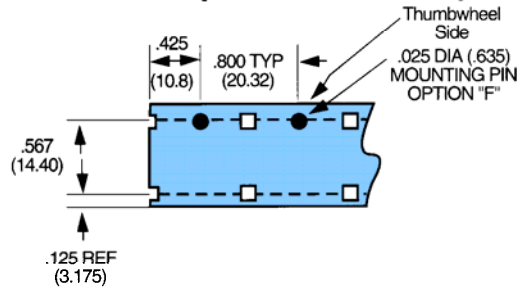
Dimensions are for single unit assemblies. When butting individual switches ( $\pm .025$  in.) must be added.

## TWO ROWS OF TERMINALS



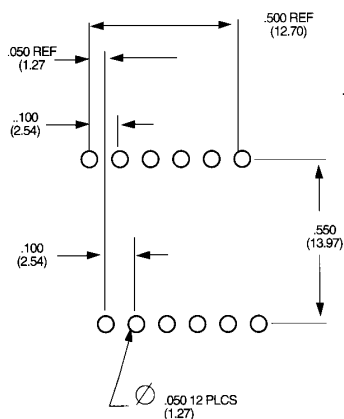
\*Terminals are staggered

## SINGLE ROW OF TERMINALS (AND WITH F-PINS)

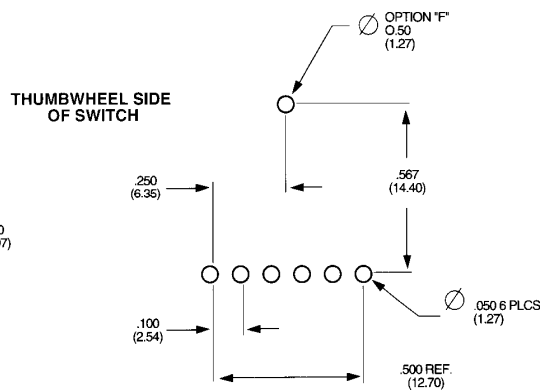


NOTE: Tolerances on all dimensions  $\pm .010$ " unless otherwise specified.  
( ) Metric dimensions in mm

## PCB LAYOUT - BOTTOM VIEW (DOUBLE ROW TERMINALS)



## PCB LAYOUT - BOTTOM VIEW (SINGLE ROW TERMINALS)



# ORIENTATION DESIGNATORS AND PCB LAYOUT INFORMATION

## ORIENTATION OF SWITCH

COUNTER CLOCKWISE ROTATION					
ORIENTATION NUMBER	10	40	50	80	90
CLOCKWISE ROTATION					
ORIENTATION NUMBER	20	30	60	70	00

Arrows indicate direction of rotation for increasing numbers. All thumbwheels can be rotated in both directions. Legend is only on the top or side as shown. For marking on top and side, consult factory.

## TERMINAL IDENTIFICATION

CODE NUMBER	-01	-02	-11	-12	-17	-19	-28
TRUTH TABLE	A02	B02	S01	C12	C15	C13	C02
CW							
CCW							

CODE NUMBER	-31 & -41	-33 & -34	-56	-57 & -58	-64
TRUTH TABLE	C16	B07	D02	D06	A09
CW					
CCW					

Views shown are of terminal side of switch with thumbwheel opening at top.

**CW** - Clockwise

**CCW** - Counter clockwise

Notes:

1. All "C" or "C" terminals must be connected together external to switch.

Option "F", F-Pin, is recommended on all switches with single-row terminals for added stability. .

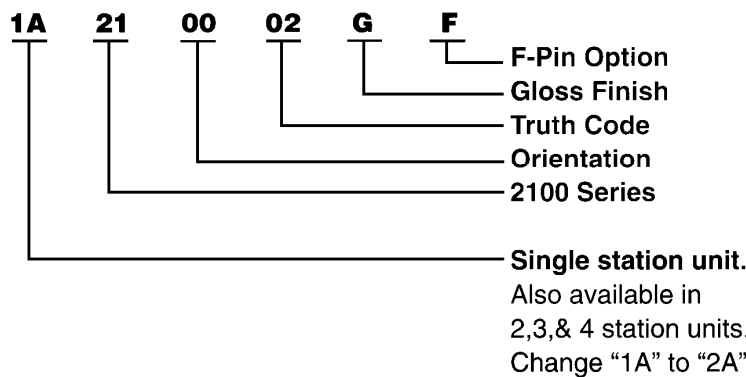
Refer to EECO Switch document "Soldering and Cleaning Specifications" for processing information.

# PART NUMBERS AND FEATURES

PART NUMBER	SWITCH DESCRIPTION	NUMBER OF POSITIONS	TRUTH TABLE
<b>SINGLE POLE DECIMAL</b>			
21XX01G	Decimal	10	A02
<b>SINGLE POLE BINARY</b>			
21XX02G	BCD 1-2-4-8	10	B02
21XX12G	BCD 1-2-4-8 Complement	10	C12
21XX17G	Complement of 9's Complement	10	C02
21XX19G	9's Complement 1-2-4-8	10	C15
21XX28G	BCD 1-2-4-8 With Complement	10	C02
21XX31G	BCH 1-2-3-8 Complement, 0-15 Marking	16	C16
21XX33G	BCH 1-2-3-8 0-15 Marking	16	B07
21XX34G	BCH 1-2-3-8 0-9-A-F Marking	16	B07
21XX41G	BCH 1-2-3-8 Complement, 0-9-A-F Marking	16	C16
<b>DOUBLE POLE BINARY</b>			
21XX56G	BCD 1-2-4-8 W/separate common to not true bits	10	D02
21XX57G	BCD 1-2-4-8 W/separate common to not true bits 0-15 marking	16	D06
21XX57G	BCD 1-2-4-8 W/separate common to not true bits 0-9-A-F marking	16	D06
<b>SPECIAL PURPOSE CODES</b>			
21XX11G	2 Pole repeating, + / -	10	S01
21XX64G	2 Pole 4 position decimal repeating	10	A09

## ORDERING INFORMATION

### PART NUMBER EXAMPLE



### OPTIONS

- F-Mounting Pins
- T-Alphabet Marking
- V-1/2" Extended Shaft (10 pos only)
- Y-1/4" Extended Shaft (10 & 16 pos)
- Stops, decimal point, or Special marking will require a special part number-consult factory.

## RoHS COMPLIANCE

EECO Switch is fully committed to complying with the European Lead-Free and RoHS directives. All EECO 2100 Series switches marked with the "Pb-Free" logo on the body of the part are Lead-Free and RoHS compliant.