ECLIPTEK® CORPORATION

Marketing Bulletin

DATE: August 25th, 2005

TO: All Sales Personnel

FROM: Mark Stoner

RE: Product Termination

To all concerned parties,

This bulletin is to notify all customers of the discontinuation of the following Ecliptek series effective August 25th, 2005:

Series	Description	Recommended Replacement
E31W2	5V 6 pad SMD LVPECL VCXO	E32D1
E32W2	3.3V 6 pad SMD LVPECL VCXO	E32D1

In compliance with our End of Life (EOL) policy, this will serve as advanced notice of product termination. New orders will not be accepted after November 25th, 2005, with delivery to conclude by February 25th 2006.

If there are any questions pertaining to this bulletin, please fell free to contact me. Thank you again for your cooperation.

Best Regards,

Mark W. Stoner
Director of Marketing
Ecliptek Corporation

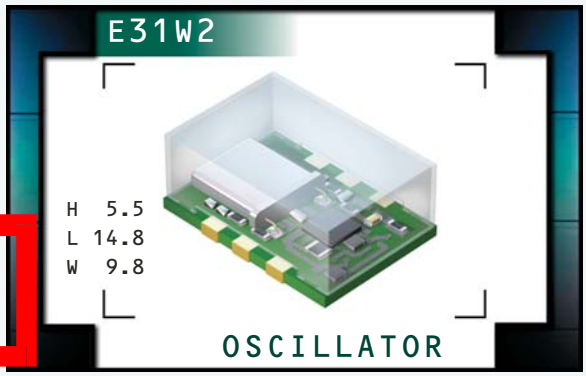
3545 CADILLAC AVENUE • COSTA MESA, CA 92626-1401 • (714) 433-1200 • Fax (714) 433-1234

E31W2 Series

ECLIPTEK CORPORATION

- PECL Output VCXO
- 5.0V supply voltage
- 6 pad PCB SMD package
- Stability to 20ppm
- Output Enable/Disable available
- Complementary Output available
- Available on Tape and Reel

OBSOLETE



ELECTRICAL SPECIFICATIONS

Frequency Range		19.440MHz to 212.500MHz
Operating Temperature Range		0°C to 70°C or -40°C to 85°C
Storage Temperature Range		-55°C to 125°C
Supply Voltage (V_{CC})		$5.0V_{DC}$ ±5%
Input Current		100mA Maximum
Logic Type		100KH
Frequency Tolerance / Stability	Inclusive of Operating Temp Range, Supply Voltage, Load, and Aging @25°C over 10 years	±50ppm, ±25ppm, or ±20ppm Maximum
Output Voltage Logic High (V_{OH})		V_{CC}-1.025V_{DC} Minimum
Output Voltage Logic Low (V_{OL})		V_{CC}-1.620V_{DC} Maximum
Rise Time / Fall Time	20% to 80% of waveform	2 nSeconds Maximum
Duty Cycle	at 50% of waveform	50 ±10(%) 50 ±5(%)
Load Drive Capability		50 Ohms into V_{CC}-2.0V_{DC}
Additional Output / Logic Control		No Connect and Single Output Enable/Disable and Single Output No Connect and Complementary Output or Enable/Disable and Complementary Output
Enable/Disable Input Voltage	V_{IL} of V_{CC}-1.475V_{DC} Maximum No Connection V_{IH} of V_{CC}-1.165V_{DC} Minimum	Enables Output Enables Output Disables Output: Logic Low Disables Complementary Output: Logic High
Start Up Time		10 mSeconds Maximum
RMS Phase Jitter	FJ = 12kHz to 20MHz	1 pSec Maximum
Absolute Pull Range (APR)	Inclusive of Operating Temp Range, Supply Voltage, Load, and Aging @25°C over 10 years	±50ppm Minimum
Linearity		20%, 15%, or 10% Maximum
Control Voltage (V_C): Test Conditions for APR		2.5V_{DC} ±2.0V_{DC}
Control Voltage Range (V_{CR})		0.0V_{DC} to V_{CC}
Center Control Voltage		2.5V_{DC}
Transfer Function		Positive Transfer Characteristic
Input Impedance		50kOhms Typical
Modulation Bandwidth	at -3dB with Control Voltage of +2.5V_{DC}	10kHz Minimum

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	E31J2	6-PCB	5.0V	OS80	01/03

OBSOLETE

PART NUMBERING GUIDE

E31W2 F 3 A 2 C - 155.520M TR

FREQUENCY TOLERANCE & STABILITY/ OPERATING TEMPERATURE RANGE
D=±50ppm Maximum over 0°C to +70°C
E=±25ppm Maximum over 0°C to +70°C
F=±20ppm Maximum over 0°C to +70°C
H=±50ppm Maximum over -40°C to +85°C

APR
3=±50ppm Minimum

LINEARITY
A=20%
B=15%
C=10%

AVAILABLE OPTIONS
Blank=Tubes
TR = Tape and Reel (Standard)

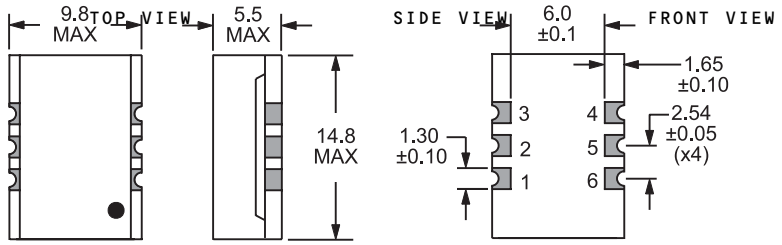
FREQUENCY

ADDITIONAL OUTPUT/LOGIC CONTROL
A=No Connect and Single Output
B=Enable/Disable and Single Output
C=No Connect and Complementary Output
D=Enable/Disable and Complementary Output

DUTY CYCLE
1=50 ±10(%), 2=50 ±5(%)

MECHANICAL DIMENSIONS

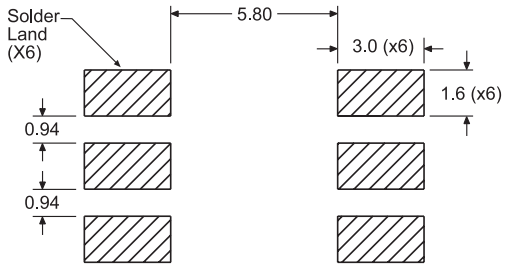
ALL DIMENSIONS IN MILLIMETERS



Pin 1: Voltage Control
Pin 2: Enable/Disable or No Connect
Pin 3: Case Ground
Pin 4: Output
Pin 5: Complementary Output or No Connect
Pin 6: Supply Voltage

SUGGESTED SOLDER PAD LAYOUT

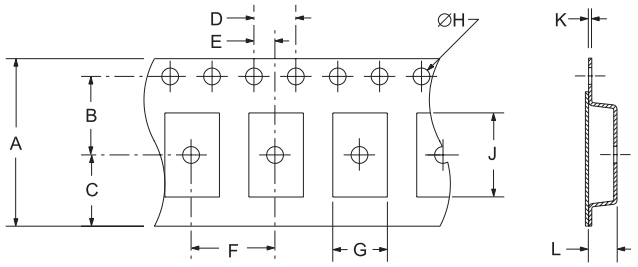
ALL DIMENSIONS IN MILLIMETERS

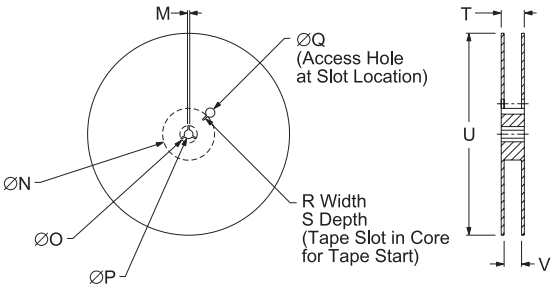


Tolerances = ±0.1

TAPE AND REEL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS





TAPE	A	B	C	D	E
	24 ±.3	11.5 ±.1	10.75 ±.1	4 ±.2	2±.1
F	G	H	J	K	L
12 ±.1	B0*	1.5 +.1-0	A0*	.4 ±.05	K0*

REEL	M	N	O	P	Q
	1.5 MIN	50 MIN	20.2 MIN	13±.2	40 MIN
R	S	T	U	V	QTY/REEL
2.5 MIN	10 MIN	30.4 MAX	360 MAX	24.4+2-0	1000

*Compliant to EIA 481A

ENVIRONMENTAL/MECHANICAL SPECIFICATIONS

Characteristic	Specification
Seal Integrity	Bubble test in Perfluorocarbon at +125°C ±5°C for 60 seconds minimum (internal crystal only).
Solderability	Sn63 Solder dip at +230°C ±5°C for 5 seconds/95% coverage.
Marking Permanency	10 Strokes with brush after 1 minute soak in solvent, 3 times.
Shock	Random drop on hard wooden plate 3 times from a height of 20cm.
Vibration	Frequency with an amplitude of 1.5mm sweeping between 10Hz to 55Hz within 1 minute (approximately) for 2 hours minimum on each axis (X, Y and Z) for a total of 6 hours.

MARKING SPECIFICATIONS

Line 1: ECLIPTEK

Line 2: XX.XXX M
- Frequency in MHz (5 Digits Maximum + Decimal)

Line 3: XX Y ZZ
- Week of Year
- Last Digit of Year
- Ecliptek Manufacturing Identifier

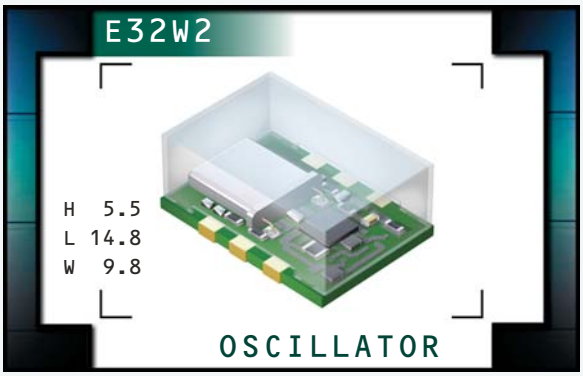
MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	E31W2	6-PCB	5.0V	OS80	01/03

E32W2 Series

ECLIPTEK CORPORATION

- PECL Output VCXO
- 3.3V supply voltage
- 6 pad PCB SMD package
- Stability to 20ppm
- Output Enable/Disable available
- Complementary Output available
- Available on Tape and Reel

OBSOLETE



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Operating Temperature Range		0°C to 70°C or -40°C to 85°C
Storage Temperature Range		-55°C to 125°C
Supply Voltage (V_{CC})		$3.3V_{DC}$ ±5%
Input Current		75mA Maximum
Logic Type		100KH
Frequency Tolerance / Stability	Inclusive of Operating Temp Range, Supply Voltage, Load, and Aging @25°C over 10 years	±50ppm, ±25ppm, or ±20ppm Maximum
Output Voltage Logic High (V_{OH})		V_{CC}-1.025V_{DC} Minimum
Output Voltage Logic Low (V_{OL})		V_{CC}-1.620V_{DC} Maximum
Rise Time / Fall Time	20% to 80% of waveform	2 nSeconds Maximum
Duty Cycle	at 50% of waveform	50 ±10(%) 50 ±5(%)
Load Drive Capability		50 Ohms into V_{CC}-2.0V_{DC}
Additional Output / Logic Control		No Connect and Single Output Enable/Disable and Single Output No Connect and Complementary Output or Enable/Disable and Complementary Output
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Start Up Time		10 mSeconds Maximum
RMS Phase Jitter	FJ = 12kHz to 20MHz	1 pSec Maximum
Absolute Pull Range (APR)	Inclusive of Operating Temp Range, Supply Voltage, Load, and Aging @25°C over 10 years	±50ppm Minimum
Linearity		20%, 15%, or 10% Maximum
Control Voltage (V_C): Test Conditions for APR		1.65V_{DC} ±1.35V_{DC}
Control Voltage Range (V_{CR})		0.0V_{DC} to V_{CC}
Center Control Voltage		1.65V_{DC}
Transfer Function		Positive Transfer Characteristic
Input Impedance		50kOhms Typical
Modulation Bandwidth	at -3dB with Control Voltage of +1.65V_{DC}	10kHz Minimum

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	E32W2	6-PCB	3.3V	OS79	01/03

OBSOLETE

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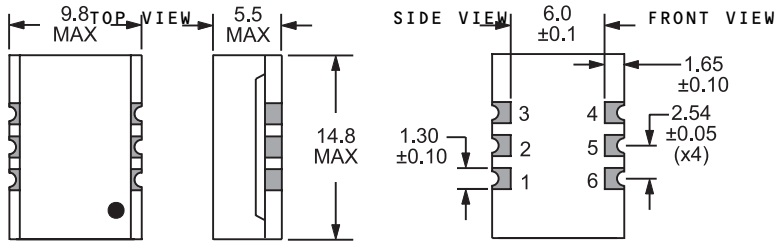

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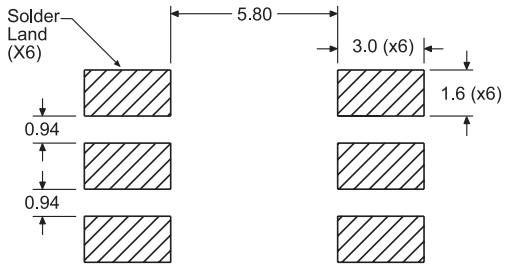

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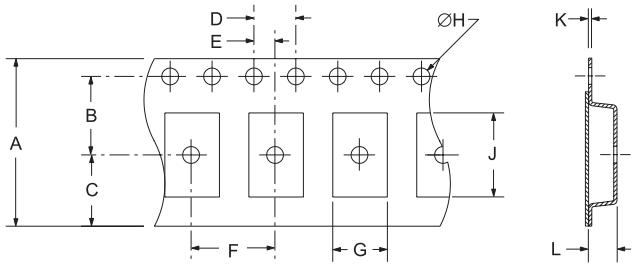

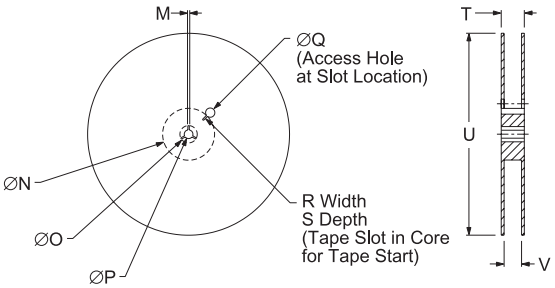

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