

Product EOL Announcement

The Product EOL Announcement signifies that a product series has entered the final phase of the Ecliptek Product Life Cycle, and serves as advance notice of product termination per the Ecliptek End of Life (EOL) policy.

Ecliptek Corporation announces End of Life initiation for the following product series with the intent of discontinuing its availability.

EOL Series	Description
E13D8	RoHS Compliant (Pb-free) 6 Pad 5mm x 7mm Ceramic SMD 3.3V LVPECL Oscillator

EOL Timeline

The last date Ecliptek will accept orders (Stage 2) and the last date orders may be scheduled for shipment (Stage 3) are listed in the table below.

Stage 1 EOL Announce Date	Stage 2 Last Date to Order	Stage 3 Last Date to Ship
17-February-2009	1-June-2009	30-September-2009

Alternative Products

In order to fulfill your requirements beyond this product's discontinuation, we invite you to evaluate the recommended alternative Ecliptek product series referenced below. Please click on the link to view the data sheet.

Alternative Series	Description
E13C7	RoHS Compliant (Pb-free) 3.3V 6 Pad 5mm x 7mm Ceramic SMD LVPECL Oscillator

Automated EOL Notification

Ecliptek offers automated notification of Product EOL Announcements. Place part numbers for which you'd like to receive EOL Notifications into your personalized [Parts List](#) on our website and we'll email you when EOL is announced.

Please do not hesitate to contact us if you have any questions or need further assistance.

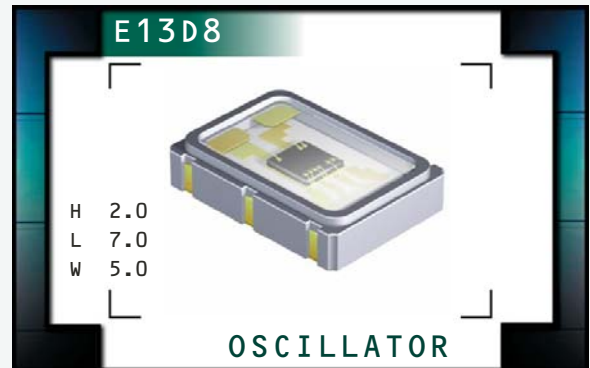
Ecliptek Global Customer Support Team
(800) 433-1280 x300
customersupport@ecliptek.com

E13D8 Series



ECLIPTEK[®]
CORPORATION

- RoHS Compliant (Pb-Free)
- LVPECL Output Oscillators
- 3.3V Supply Voltage
- Ceramic 6-pad SMD Package
- Stability to ± 25 ppm
- Tri-State Output
- Complementary Output
- Available on Tape and Reel
- Wide Range of Available Frequencies



OBSOLETE

ELECTRICAL SPECIFICATIONS

Nominal Frequency	75MHz, 77.76MHz, 80MHz, 100MHz, 106.25MHz, 125MHz, 150MHz, 155.52MHz, 156.25MHz, 159.375MHz, 187.5MHz, 212.5MHz, 250MHz, 311.04MHz, 312.5MHz	
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} $\pm 5\%$	
Input Current	With Load	75mA Maximum
Frequency Tolerance / Stability	Inclusive of All Conditions: Calibration Tolerance at 25°C, Frequency Stability over the Operating Temperature Range, Supply Voltage Change, Output Load Change, 1st Year Aging at 25°C, Shock, and Vibration	± 50 ppm Maximum, or ± 25 ppm Maximum
Output Voltage Logic High (V_{OH})	$V_{CC} - 1.4V_{DC}$ Minimum, $V_{CC} - 1.2V_{DC}$ Typical, $V_{CC} - 0.9V_{DC}$ Maximum	
Output Voltage Logic Low (V_{OL})	$V_{CC} - 1.7V_{DC}$ Minimum, $V_{CC} - 1.85V_{DC}$ Typical, $V_{CC} - 2.0V_{DC}$ Maximum	
Peak to Peak Output Voltage Swing	600mVdc Minimum, 800mVdc Typical, 1000mVdc Maximum	
Rise Time / Fall Time	20% to 80% of waveform	300pSec Typical, 600pSec Maximum
Duty Cycle	at 50% of waveform	50 ± 5 (%)
Load Drive Capability	50 Ohms into $V_{CC} - 2.0V_{DC}$	
Logic Control / Additional Output	Tri-State and Complementary Output	
Tri-State Input Voltage	V_{IH} of 70% of V_{CC} Minimum No Connection V_{IL} of 30% of V_{CC} Maximum	Enables Output Enables Output Disables Output: High Impedance
Standby Current	Disabled Output, High Impedance, Without Load	600 μ A Maximum
Start Up Time	10 mSeconds Maximum	
RMS Phase Jitter	FJ = 12kHz to 20MHz	0.7pSec Typical, 1 pSec Maximum
Typical Phase Noise	Fo=156.250MHz	-60dBc/Hz at 10Hz Offset -90dBc/Hz at 100Hz Offset -115dBc/Hz at 1kHz Offset -129dBc/Hz at 10kHz Offset -130dBc/Hz at 100kHz Offset -131dBc/Hz at 1MHz Offset -148dBc/Hz at 10MHz Offset

MANUFACTURER ECLIPTEK CORP.	CATEGORY OSCILLATOR	SERIES E13D8	PACKAGE CERAMIC	VOLTAGE 3.3V	CLASS OS4N	REV. DATE 10/07
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PART NUMBERING GUIDE

E13D8 D 2 F - 155.520M TR

FREQUENCY TOLERANCE & STABILITY/
OPERATING TEMPERATURE RANGE

C=±25ppm Maximum over 0°C to +70°C
 D=±50ppm Maximum over 0°C to +70°C
 G=±25ppm Maximum over -40°C to +85°C
 H=±50ppm Maximum over -40°C to +85°C

AVAILABLE OPTIONS

Blank= Tubes
 TR= Tape and Reel (Standard)

FREQUENCY

LOGIC CONTROL/ADDITIONAL OUTPUT

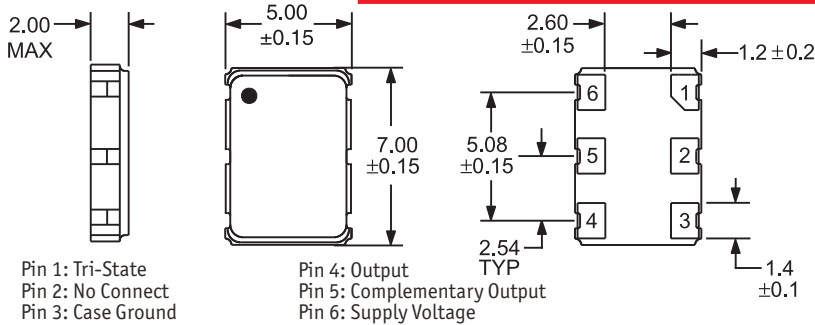
F= Tri-State and Complementary Output

OBSOLETE

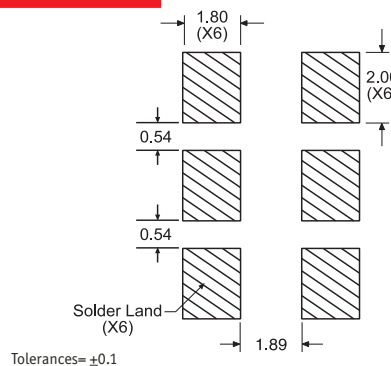
PERFORMANCE CHARACTERISTICS

±0.5%

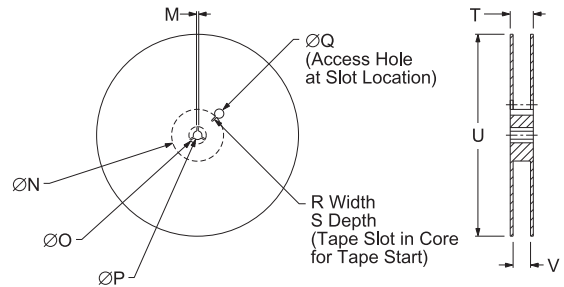
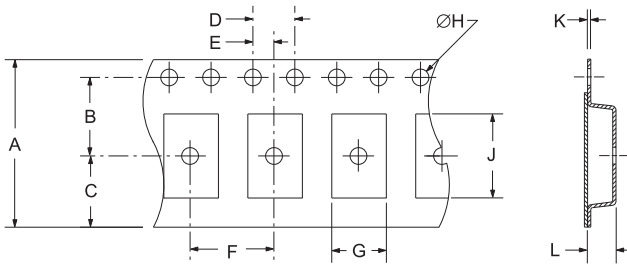
MECHANICAL DIMENSIONS
ALL DIMENSIONS IN MILLIMETERS



SUGGESTED SOLDER PAD LAYOUT
IN MILLIMETERS



TAPE AND REEL DIMENSIONS
ALL DIMENSIONS IN MILLIMETERS



TAPE	A	B	C	D	E
	16±.3-1	7.5±.1	6.75±.1	4 ±.1	2±.1
F	G	H	J	K	L
8±.1	B0*	1.5 +.1-0	A0*	.3±.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	22.4 MAX	360 MAX	16.4+2-0	1,000

*Compliant to EIA 481A

ENVIRONMENTAL/MECHANICAL SPECIFICATIONS

Characteristic	Specification
Fine Leak Test	MIL-STD-883, Method 1014, Condition A
Gross Leak Test	MIL-STD-883, Method 1014, Condition C
Mechanical Shock	MIL-STD-202, Method 213, Condition C
Vibration	MIL-STD-883, Method 2007, Condition A
Solderability	MIL-STD-883, Method 2002
Temperature Cycling	MIL-STD-883, Method 1010
Resistance to Soldering Heat	MIL-STD-202, Method 210
Resistance to Solvents	MIL-STD-202, Method 215

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	E13D8	CERAMIC	3.3V	OS4N	10/07