

Marketing Bulletin

DATE: March 24th, 2006
TO: All Sales Personnel
FROM: Mark Stoner
RE: Product Termination

To all concerned parties,

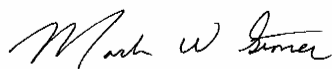
This bulletin is to notify all customers of the discontinuation of the following Ecliptek series effective March 24th, 2006:

Series	Description	Recommended Replacement
E13C9	3.3V 5 x 7mm SMD LVPECL Oscillator	E13C7 or E13D8

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 July 1st, 2006, with delivery to conclude by October 1st 2006.

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

Best Regards,



Mark W. Stoner
Director of Marketing
Ecliptek Corporation

E13C9 Series

- RoHS Compliant (Pb-Free)
- LVPECL Output Oscillators
- 3.3V Supply Voltage
- AT-Cut Fundamental Mode Inverted Mesa Crystal
- Ceramic 6-pad SMD Package
- Stability to 25ppm
- Tri-State Enable High and Enable Low Options Available on Pad 1 or Pad 2
- Complementary Output
- Wide Range of Available Frequencies



ECLIPTEK
CORPORATION



OBSOLETE

ELECTRICAL SPECIFICATIONS

Nominal Frequency		19.440MHz to 200.000MHz
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
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	±100ppm, ±50ppm, or ±25ppm 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	1.5 nSeconds Maximum, 600 pSec Typical
Duty Cycle	at 50% of waveform	50 ±10(%) 50 ±5(%)
Load Drive Capability		50 Ohms into V _{cc} -2.0V _{dc}
Logic Control / Additional Output		No Connect and Complementary Output or Tri-State and Complementary Output
Enable High Tri-State Input Voltage	Enable High or Enable Low	Enables Output
	V _{IH} of 70% of V _{cc} Minimum	Enables Output
	No Connection	Enables Output
Enable Low Tri-State Input Voltage	V _{IL} of 30% of V _{cc} Maximum	Disables Output: High Impedance
	V _{IH} of 70% of V _{cc} Minimum	Disables Output: High Impedance
	No Connection	Enables Output
Output Disable Current	V _{IL} of 30% of V _{cc} Maximum	Enables Output
		25mA Maximum
Start Up Time		10 mSeconds Maximum
RMS Phase Jitter	< 44.736MHz; F _j = 12kHz to 20MHz	5 pSec Maximum
	≥ 44.736MHz, < 77.760MHz; F _j = 12kHz to 20MHz	2 pSec Maximum
	≥ 77.760MHz; F _j = 12kHz to 20MHz	1 pSec Maximum
Phase Noise (at 155.520MHz)	at 10Hz Offset	-75dBc/Hz Typical
	at 100Hz Offset	-95dBc/Hz Typical
	at 1kHz Offset	-125dBc/Hz Typical
	at 10kHz Offset	-140dBc/Hz Typical
	at 100kHz Offset	-145dBc/Hz Typical

MANUFACTURER
ECLIPTEK CORP.

CATEGORY
OSCILLATOR

SERIES
E13C9

PACKAGE
CERAMIC

VOLTAGE
3.3V

CLASS
OS1T

REV. DATE
06/04

PART NUMBERING GUIDE

E13C9 E 2 F - 155.520M TR

FREQUENCY TOLERANCE & STABILITY/ OPERATING TEMPERATURE RANGE

C=±100ppm Maximum over 0°C to +70°C
D=±50ppm Maximum over 0°C to +70°C
E=±25ppm Maximum over 0°C to +70°C
G=±100ppm Maximum over -40°C to +85°C
H=±50ppm Maximum over -40°C to +85°C
J=±25ppm Maximum over -40°C to +85°C

DUTY CYCLE

1=50% ±10%, 2=50% ±5%

AVAILABLE OPTIONS

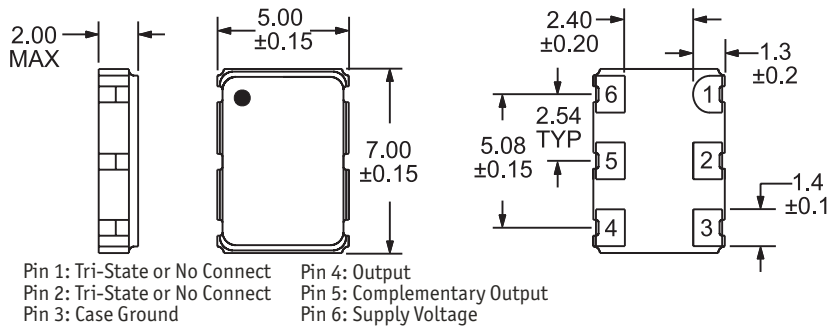
Blank=Tubes
TR=Tape and Reel (Standard)

FREQUENCY

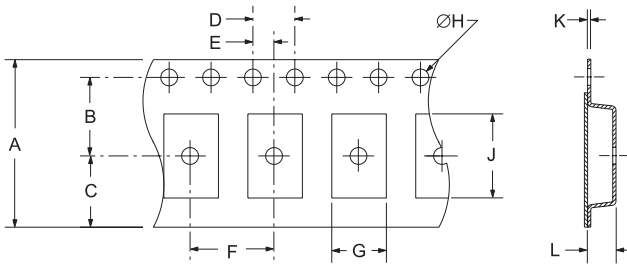
LOGIC CONTROL/ADDITIONAL OUTPUT

C=No Connect and Complementary Output
F=Tri-State (Enable High) on Pad 1 and Complementary Output
H=Tri-State (Enable High) on Pad 2 and Complementary Output
J=Tri-State (Enable Low) on Pad 1 and Complementary Output
K=Tri-State (Enable Low) on Pad 2 and Complementary Output

MECHANICAL DIMENSIONS ALL DIMENSIONS IN MILLIMETERS

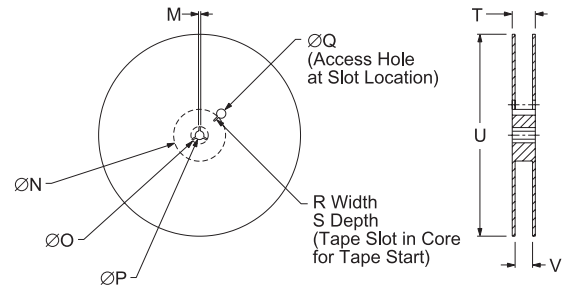
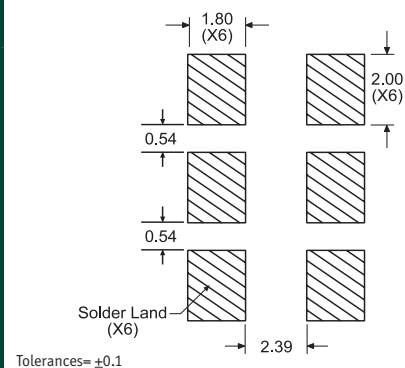


TAPE AND REEL DIMENSIONS ALL DIMENSIONS IN MILLIMETERS



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*

SUGGESTED SOLDER PAD LAYOUT ALL DIMENSIONS IN MILLIMETERS



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

Fine Leak Test
Gross Leak Test
Mechanical Shock
Vibration
Solderability
Temperature Cycling
Resistance to Soldering Heat
Resistance to Solvents

Specification

MIL-STD-883, Method 1014, Condition A
MIL-STD-883, Method 1014, Condition C
MIL-STD-202, Method 213, Condition C
MIL-STD-883, Method 2007, Condition A
MIL-STD-883, Method 2002
MIL-STD-883, Method 1010
MIL-STD-202, Method 210
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
Eclipse Manufacturing Identifier

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	E13C9	CERAMIC	3.3V	OS1T	06/04