

Marketing Bulletin

DATE: January 1st, 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 January 1st, 2006:

Series	Description	Recommended Replacement
EB13C8	3.3V 5 x 7mm SMD Oscillator	EC26

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 April 1st, 2006, with delivery to conclude by July 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

EB13C8 Series



- RoHS Compliant (Pb-Free)
- Low Jitter
- Ceramic SMD package
- 3.3V supply voltage
- LVHCMOS
- Stability to 20ppm
- Standby Function
- Available in tube or tape and reel



OBSOLETE

ELECTRICAL SPECIFICATIONS

Frequency Range	19.440MHz to 125.000MHz and 125.009MHz, 125.009375MHz, 125.010MHz, 127MHz, 128MHz, 130MHz, 132MHz, 133MHz, 133.333MHz, 137.472MHz, 142.850MHz, 150MHz, 155.520MHz and 156.250MHz	
Operating Temperature Range	Not available with ± 20 ppm option > 106.250MHz	0°C to 70°C -40°C to 85°C
Storage Temperature Range		-55°C to 125°C
Supply Voltage (V_{DD})		3.3V _{DC} $\pm 10\%$
Input Current	19.440MHz to 35.000MHz 35.001MHz to 70.000MHz 70.001MHz to 125.000MHz 125.001MHz to 156.250MHz	10mA Maximum 20mA Maximum 40mA Maximum 60mA 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, First Year Aging at 25°C, Shock, and Vibration	± 100 ppm, ± 50 ppm, ± 25 ppm or ± 20 ppm Maximum
Output Voltage Logic High (V_{OH})		90% of V _{DD} Min. I _{OH} = -8mA
Output Voltage Logic Low (V_{OL})		10% of V _{DD} Max. I _{OL} = +8mA
Rise / Fall Time	20% to 80% of Waveform w/15pF HCMOS Load from 19.440MHz to 35.000MHz 20% to 80% of Waveform w/30pF HCMOS Load from 19.440MHz to 35.000MHz 20% to 80% of Waveform w/HCMOS Load from 35.001MHz to 50.000MHz 20% to 80% of Waveform w/HCMOS Load from 50.001MHz to 80.000MHz 20% to 80% of Waveform w/HCMOS Load from 80.001MHz to 125.000MHz 20% to 80% of Waveform w/HCMOS Load from 125.009MHz to 156.250MHz	5 nSec Maximum 7 nSec Maximum 5 nSec Maximum 4 nSec Maximum 2 nSec Maximum 1 nSec Maximum
Duty Cycle	at 50% of Waveform at 50% of Waveform ≤ 125.000 MHz at 50% of waveform, at 25°C, at 3.3Vdc > 125.000MHz	50 ± 10 (%) 50 ± 5 (%) 50 ± 5 (%)
Load Drive Capability	≤ 35.000 MHz > 35.001MHz	30pF HCMOS Load Maximum 15pF HCMOS Load Maximum
Tri-State Input Voltage	No Connection V _{IH} : $\geq 70\%$ of V _{DD} V _{IL} : $\leq 30\%$ of V _{DD}	Enables Output Enables Output Disables Output: High Impedance
Standby Current	Disabled Output: High Impedance	10 μ A Maximum
Start Up Time		10 mSec Maximum
RMS Phase Jitter	19.440MHz to 40.000MHz, F _J = 12kHz to 20MHz 40.001MHz to 70.000MHz, F _J = 12kHz to 20MHz 70.001MHz to 156.250MHz, F _J = 12kHz to 20MHz	5 pSec Maximum 3 pSec Maximum 1 pSec Maximum

MANUFACTURER ECLIPTEK CORP.	CATEGORY OSCILLATOR	SERIES EB13C8	PACKAGE CERAMIC	VOLTAGE 3.3V	CLASS OS2H	REV. DATE 04/05
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PART NUMBERING GUIDE

EB13C8 F 2 H - 40.000M TR

FREQUENCY TOLERANCE / STABILITY

- 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
- F=±20ppm 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
- K=±20ppm Maximum over -40°C to +85°C

PACKAGING OPTIONS

Blank=Bulk, TR=Tape and Reel (Standard)

FREQUENCY

OUTPUT CONTROL FUNCTION

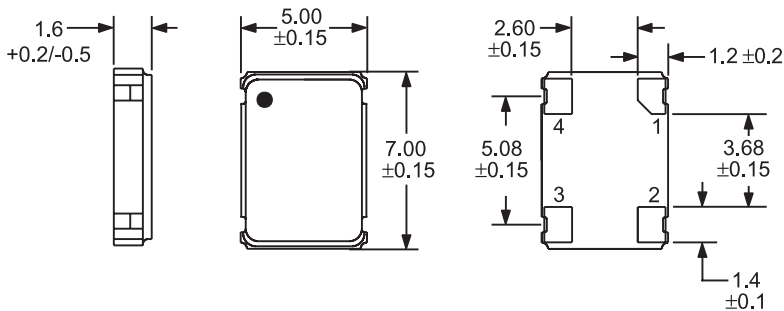
H=Tri-State

DUTY CYCLE

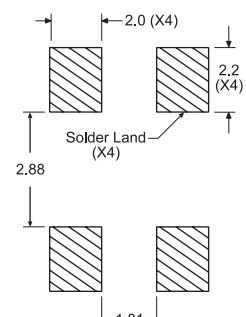
- 1=50 ±10(%)
- 2=50 ±5(%)

OBSOLETE

MECHANICAL DIMENSIONS
ALL DIMENSIONS IN MILLIMETERS



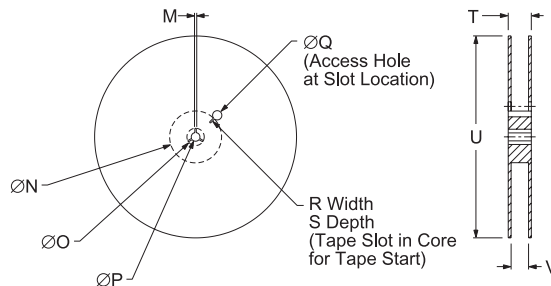
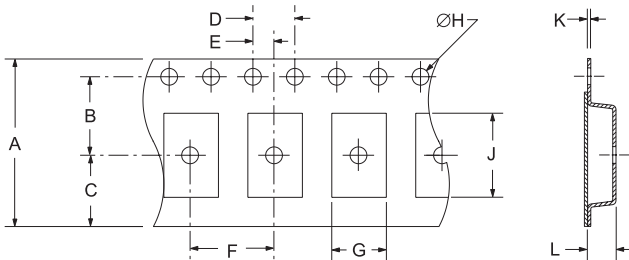
SUGGESTED SOLDER PAD LAYOUT
ALL DIMENSIONS IN MILLIMETERS



Tolerances = ±0.1

Pin 1: Tri-State
Pin 2: Case Ground
Pin 3: Output
Pin 4: Supply Voltage

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

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