

Marketing Bulletin

DATE: November 7th, 2007
TO: All Sales Personnel
FROM: Isaac Gonzalez
RE: Product Termination

To all concerned parties,

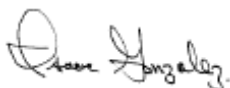
This bulletin is to notify all customers of the discontinuation of the following Ecliptek series effective November 7th, 2007:

Series	Description	Recommended Replacement
EB14E2	3.0V 4 Pad SMD Ceramic Oscillator	EB13E2 or EB15E2

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 May 31th, 2008, with delivery to conclude by November 30th 2008.

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

Best Regards,



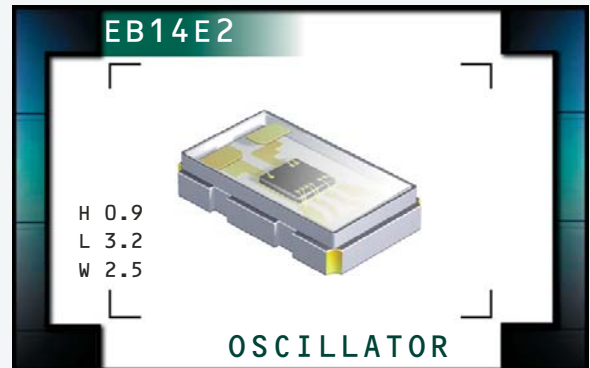
Isaac Gonzalez
Configuration Manager
Ecliptek Corporation

EB14E2 Series



ECLIPTEK[®]
CORPORATION

- RoHS Compliant (Pb-Free)
- Ceramic SMD package
- 3.0V Supply Voltage
- LVHCMOS output
- Stability to ± 25 ppm
- Standby Function
- Available on Tape and Reel



NOTES

OBSOLETE

ELECTRICAL SPECIFICATIONS

Frequency Range (F_0)	1.8432MHz, 3.5795MHz, 3.6864MHz, 4.000MHz, 6.000MHz, 7.3728MHz, 8.000MHz, 8.2944MHz, 11.2896MHz, 12.000MHz, 12.288MHz, 12.800MHz, 16.000MHz, 16.9344MHz, 20.000MHz, 22.000MHz, 22.1184MHz, 24.000MHz, 24.576MHz, 25.000MHz, 26.000MHz, 27.000MHz, 28.375MHz, 28.636MHz, 29.4912MHz, 30.000MHz, 32.000MHz, 33.000MHz, 33.333MHz, 40.000MHz, 41.010MHz, 44.000MHz, 48.000MHz, 50.000MHz, 54.000MHz, 64.000MHz, 66.000MHz, 66.6666MHz, 72.000MHz, and 75.000MHz
Operating Temperature Range (OTR)	-20°C to 70°C -40°C to 85°C
Storage Temperature Range (STR)	-55°C to 125°C
Supply Voltage (V_{DD})	3.0V _{DC} $\pm 5\%$
Input Current (I_{DD})	1.8432MHz to 20.000MHz: 6mA Maximum 20.001MHz to 40.000MHz: 11mA Maximum 40.001MHz to 60.000MHz: 16mA Maximum 60.001MHz to 75.000MHz: 20mA Maximum
Frequency Tolerance/Stability	Inclusive of all conditions: Calibration Tolerance at 25°C, ± 100 ppm, ± 50 ppm, or ± 25 ppm Frequency Stability over the Operating Temperature Range, Maximum Supply Voltage Change, Output Load Change, First Year Aging at 25°C, Shock, and Vibration
Output Voltage Logic High (V_{OH})	90% of V_{DD} Minimum ($I_{OH} = -4$ mA)
Output Voltage Logic Low (V_{OL})	10% of V_{DD} Maximum ($I_{OL} = +4$ mA)
Rise Time / Fall Time (T_R/T_F)	20% to 80% of Waveform: 10 nSeconds Maximum
Duty Cycle (SYM)	at 50% of Waveform: 50 ± 5 (%)
Load Drive Capability (C_{LOAD})	15pF HCMOS Load Maximum
Tri-State Input Voltage	No Connection: Enables Output $V_{IH} \geq 80\%$ of V_{DD} : Enables Output $V_{IL} \leq 20\%$ of V_{DD} : Disables Output: High Impedance
Standby Current	Disabled Output: High Impedance: 10 μ A Maximum
Start Up Time (T_S)	10 mSeconds Maximum
RMS Phase Jitter	$F_J = 12$ kHz to 20MHz: 1 pSeconds Maximum

MANUFACTURER
ECLIPTEK CORP.

CATEGORY
OSCILLATOR

SERIES
EB14E2

PACKAGE
CERAMIC

VOLTAGE
3.0V

CLASS
OS5B

REV. DATE
02/06

PART NUMBERING GUIDE

EB14E2 E 2 H - 40.000M TR

FREQUENCY TOLERANCE / STABILITY

C=±100ppm Maximum over -20°C to +70°C
 D=±50ppm Maximum over -20°C to +70°C
 E=±25ppm Maximum over -20°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

PACKAGING OPTIONS

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

FREQUENCY

OUTPUT CONTROL FUNCTION

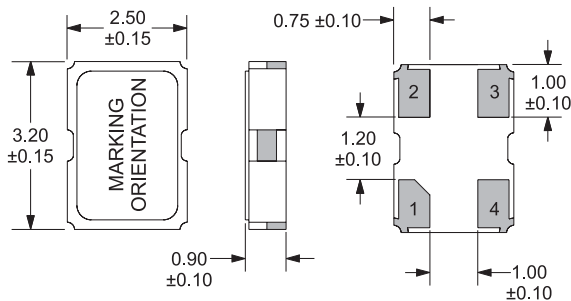
H=Tri-State

DUTY CYCLE

50%

OBSOLETE

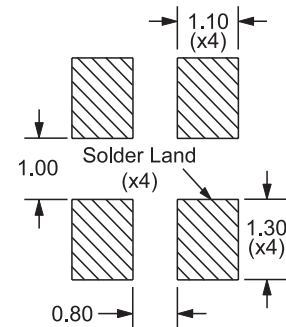
MECHANICAL DIMENSIONS ALL DIMENSIONS IN MILLIMETERS



Pin 1: Tri-State
Pin 2: Case Ground

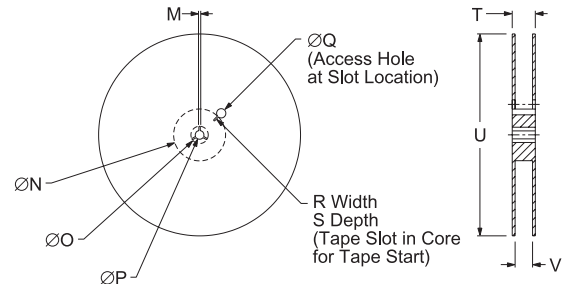
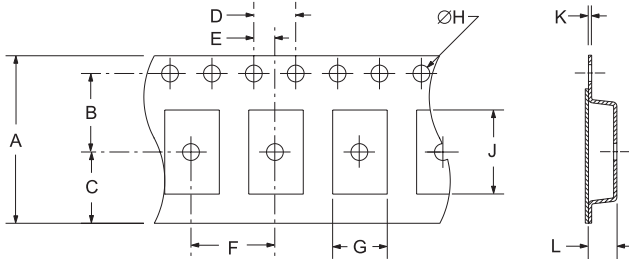
Pin 3: Output
Pin 4: Supply Voltage

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	
	8.0±0.2	3.5±0.1	2.75±0.1	4.0±0.1	2.0±0.1	
F	G	H	J	K	L	
	4.0±0.1	2.7±.1	1.55+0.5	3.4±.1	0.25±0.05	1.4±.1

REEL	M	N	O	P	Q	
	1.5 MIN	50 MIN	20.2 MIN	13.0±0.5	40 MIN	
R	S	T	U	V	QTY/REEL	
	2.5 MIN	10 MIN	14.4 MAX	180 MAX	8.4+1.5-0	1,000

*Compliant to EIA 481A

ENVIRONMENTAL/MECHANICAL SPECIFICATIONS

PARAMETER

Specification

Fine Leak Test JIS C 6701 10.6 Leak Rate: 2.1×10^{-9} Pa-m³/6 Maximum.
 Gross Leak Test JIS C 6701 10.6 Leak Rate: 1.27×10^{-5} Pa-m³/8 Maximum.
 Mechanical Shock Random drop on rigid hard wood surface 3 times at heights of 75cm.
 High Temperature Storage JIS C 7021 B-10: at 85°C for 1000 hours.
 Low Temperature Storage JIS C 7021 B-12: at -40°C for 1000 hours.
 Moisture Resistance JIS C 7021 B-11: at 85°C and 90% humidity for 1000 hours.
 Solder Thermal Stabilit Recommended Solder Reflow profile 1 time.
 Thermal Shock 100 cycles over -40°C to +85°C for 30 minutes
 Vibration JIS C 6701 10.26: at 10Hz to 55Hz, 1.5mm amplitude for 1 minute. Test time: X, Y, Z each direction for 2 hours.

MARKING SPECIFICATIONS

Line 1: E XX.X

Frequency in MHz (3 Digits Maximum + Decimal)

Line 2: XX Y ZZ

Week of Year
Last Digit of Year
Ecliptek Manufacturing Identifier

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EB14E2	CERAMIC	3.0V	OS5B	02/06