

### **Marketing Bulletin**

**DATE:** January 1<sup>st</sup>, 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 1<sup>st</sup>, 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 1<sup>st</sup>, 2006, with delivery to conclude by July 1<sup>st</sup> 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

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**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,							
		133MH	lz, 133.333MHz, 137.472	MHz, 142.850MHz, 150MH	lz, 155.520MHz and 150	5.250MHz			
Operating Temperature Range					0°C to 70°C				
		Not av	ailable with ±20ppm opt	ion > 106.250MHz		-40°C to 85°C			
Storage Temperatu						-55°C to 125°C			
Supply Voltage (V <sub>D</sub>	<sub>00</sub> )					3.3V <sub>DC</sub> ±10%			
Input Current		19.440MHz to 35.000MHz				10mA Maximum			
		35.001	MHz to 70.000MHz			20mA Maximum			
		70.001	MHz to 125.000MHz			40mA Maximum			
		125.00	1MHz to 156.250MHz			60mA Maximum			
Frequency Tolerand	ce / Stability	Inclusi	ve of all conditions: Cali	bration Tolerance at 25°C	,	±100ppm, ±50ppm, ±25p	pm or		
		Freque	ncy Stability over the Op	erating Temperature Rand	ie,	±20ppm Maximum			
		Supply	Voltage Change, Output	Load Change, First Year A	ging				
		at 25°	C, Shock, and Vibration	· ·					
Output Voltage Log	gic High (V <sub>OH</sub> )					90% of $V_{DD}$ Min. $I_{OH}$ = -8r	nA		
Output Voltage Log	gic Low (V <sub>OL</sub> )					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				5 nSec Maximum			
•		20% to 80% of Waveform w/30pF HCMOS Load from 19.440MHz to 35.000MHz				7 nSec Maximum			
				MOS Load from 35.001MH		5 nSec Maximum			
		20% to 80% of Waveform w/HCMOS Load from 50.001MHz to 80.000MHz				4 nSec Maximum			
		20% to 80% of Waveform w/HCMOS Load from 80.001MHz to 125.000MHz				2 nSec Maximum			
		20% to 80% of Waveform w/HCMOS Load from 125.009MHz to 156.250MHz				1 nSec Maximum			
Duty Cycle		at 50% of Waveform				50 ±10(%)			
		at 50% of Waveform ≤ 125.000MHz				50 ±5(%)			
		at 50%	of waveform, at 25°C, a	t 3.3Vdc > 125.000MHz		50 ±5(%)			
Load Drive Capability		<35.000MHz				30pF HCMOS Load Maximum			
		> 35.0	01MHz			15pF HCMOS Load Maxim	um		
Tri-State Input Voltage		No Connection				Enables Output			
-		V <sub>ты</sub> :≥7	0% of V <sub>DD</sub>			Enables Output			
			0% of V <sub>DD</sub>			Disables Output: High Impe	dance		
Standby Current		Disabled Output: High Impedance				10µA Maximum			
Start Up Time						10 mSec Maximum			
RMS Phase Jitter		19.440MHz to 40.000MHz, F <sub>1</sub> = 12kHz to 20MHz				5 pSec Maximum			
		$40.001 \text{MHz}$ to $70.000 \text{MHz}$ , $F_1 = 12 \text{kHz}$ to $20 \text{MHz}$				3 pSec Maximum			
			MHz to 156.250MHz, $F_{1}$			1 pSec Maximum			
MANUFACTURER	CATEGORY		SERIES	PACKAGE	VOLTAGE	CLASS	REV - DATE		
ECLIPTEK CORP.	OSCILLATOR		EB13C8	CERAMIC	3.3V	0S2H	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**

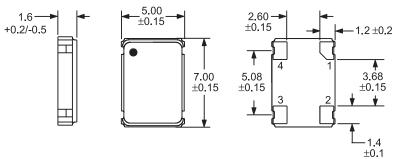
 $1=50\pm10(\%)$ 

2=50 ±5(%)

## BSOLETE

#### MECHANICAL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS



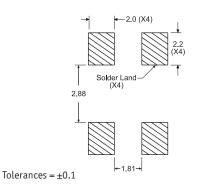
TAPE AND REEL DIMENSIONS

Pin 1: Tri-State Pin 2: Case Ground

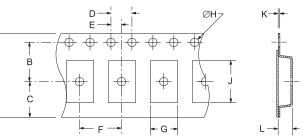
Pin 3: Output Pin 4: Supply Voltage

#### SUGGESTED SOLDER PAD LAYOUT

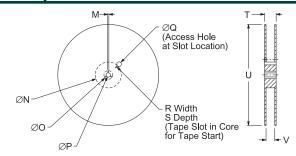
ALL DIMENSIONS IN MILLIMETERS



ALL DIMENSIONS IN MILLIMETERS



TAPE	Α	В	С	D	E
	16+.31	7.5±.1	6.75±.1	4 ±.1	2±.1
F	G	Н	J	K	L
8±.1	B0*	1.5 +.1-0	A0*	.3 ±.05	K0*



REEL	M	N	0	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 Ecliptek Manufacturing Identifier

MANUFACTURER CATEGORY PACKAGE SERIES VOLTAGE CLASS ECLIPTEK CORP. OSCILLATOR EB13C8 CERAMIC 04/05 3.3V 0S2H