

## Marketing Bulletin

**DATE:** April 20<sup>th</sup>, 2010  
**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 April 20<sup>th</sup>, 2010:

<b>Series</b>	<b>Description</b>	<b>Recommended Replacement</b>
EC28	RoHS Compliant (Pb-free) 2.5V 14 Pin DIP Metal Thru-Hole LVCMOS Oscillator	<a href="#">EH27</a>
EC28HS	RoHS Compliant (Pb-free) 2.5V 8 Pin DIP Metal Thru-Hole LVCMOS Oscillator	<a href="#">EH27</a>

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 September 1<sup>st</sup>, 2010, with delivery to conclude by December 1<sup>st</sup>, 2010.

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

Best Regards,



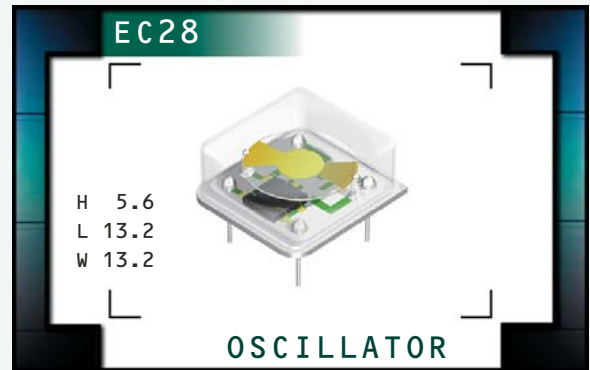
Isaac Gonzalez  
Configuration Manager  
Ecliptek Corporation

# EC28 Series



ECLIPTEK<sup>®</sup>  
CORPORATION

- Crystal Clock Oscillators
- LVCMOS Output
- +2.5V Supply Voltage
- Tri-State Output Option
- Custom Lead Length & Gull Wing Options
- 8 pin DIP Metal Package
- RoHS Compliant (Pb-free)



## NOTES

### ELECTRICAL SPECIFICATIONS

<b>Frequency Range (MHz)</b>		1.544MHz to 33.000MHz
<b>Operating Temperature Range (OTR)</b>	±100ppm, ±50ppm, or ±25ppm ±20ppm	0°C to 70°C or -40°C to 85°C 0°C to 70°C
<b>Storage Temperature Range (STR)</b>		-55°C to 125°C
<b>Supply Voltage (V<sub>DD</sub>)</b>		2.5V <sub>DC</sub> ±5%
<b>Input Current (I<sub>DD</sub>)</b>	≤24.000MHz >24.000MHz	10mA Maximum 20mA Maximum
<b>Frequency Tolerance / Stability</b>	Inclusive of Operating Temperature Range, Supply Voltage, and Load	±100ppm, ±50ppm, ±25ppm, or ±20ppm Maximum (0°C to 70°C Only)
<b>Output Voltage Logic High (V<sub>OH</sub>)</b>		90% of V <sub>DD</sub> Minimum I <sub>OH</sub> =-4mA
<b>Output Voltage Logic Low (V<sub>OL</sub>)</b>		10% of V <sub>DD</sub> Maximum I <sub>OL</sub> =+4mA
<b>Rise Time / Fall Time (T<sub>R</sub>/T<sub>F</sub>)</b>	20% to 80% of Waveform ≤24.000MHz 20% to 80% of Waveform >24.000MHz	6 nSeconds Maximum 4 nSeconds Maximum
<b>Duty Cycle (SYM)</b>	at 50% of Waveform	50 ±10(%) (Standard) or 50 ±5(%) (Optional)
<b>Load Drive Capability (C<sub>LOAD</sub>)</b>		15pF Maximum
<b>Tri-State Input Voltage</b>	V <sub>IH</sub> : No Connection V <sub>IH</sub> : ≥90% of V <sub>DD</sub> V <sub>IL</sub> : ≤10% of V <sub>DD</sub>	Enables Output Enables Output Disables Output: High Impedance
<b>Aging (at 25°C)</b>		±5ppm / year Maximum
<b>Start Up Time (T<sub>s</sub>)</b>		10mSeconds Maximum
<b>Period Jitter: Absolute</b>		±100pSeconds Maximum
<b>Period Jitter: One Sigma</b>		±25pSeconds Maximum

MANUFACTURER  
ECLIPTEK CORP.

CATEGORY  
OSCILLATOR

SERIES  
EC28

PACKAGE  
8 pin DIP

VOLTAGE  
2.5V

CLASS  
OS54

REV. DATE  
08/06

## PART NUMBERING GUIDE

### EC28 00 HS ET TS - 32.000M - G TR

**FREQUENCY TOLERANCE / STABILITY**

00=±100ppm Maximum  
 45=±50ppm Maximum, 25=±25ppm Maximum  
 20=±20ppm Maximum

**PACKAGE**

HS=Half Size 8 Pin DIP

**OPERATING TEMP. RANGE**

Blank=0°C to 70°C, ET=-40°C to 85°C

**DUTY CYCLE**

Blank=50 ±10(%), T=50 ±5(%)

**PACKAGING OPTIONS**

TR= Tape & Reel (only offered with Half Size G and Half Size G2 Options)

**AVAILABLE OPTIONS**

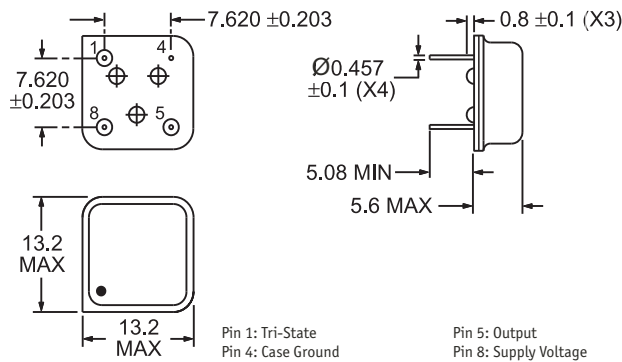
Blank=None  
 CLXX=Custom Lead Length  
 G=Half Size Gull Wing  
 G2=Half Size Gull Wing

**FREQUENCY**

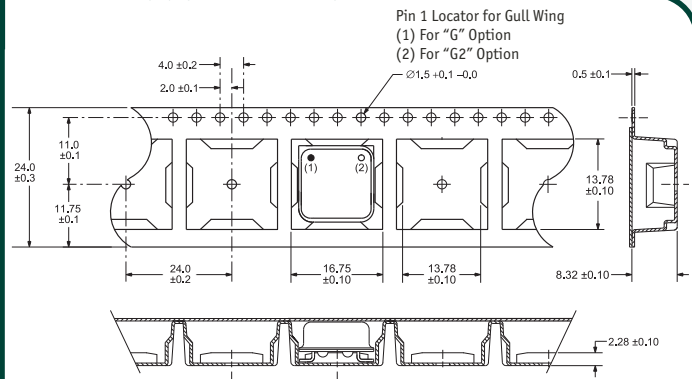
**OUTPUT CONTROL FUNCTION**

TS=Tri-State Enable High

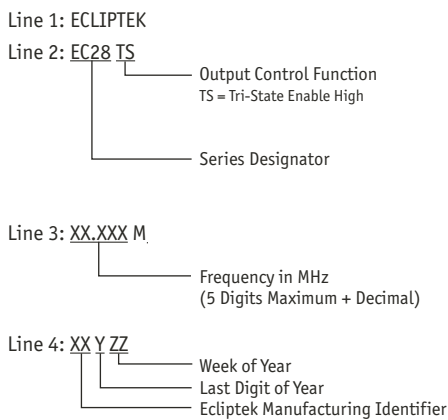
**MECHANICAL DIMENSIONS**  
 ALL DIMENSIONS IN MILLIMETERS



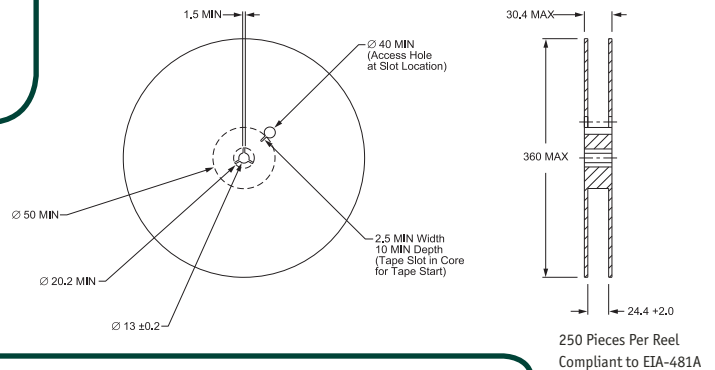
**TAPE AND REEL DIMENSIONS**  
 ALL DIMENSIONS IN MILLIMETERS



**MARKING SPECIFICATIONS**



Note: Pin 1 shall be designated with a dot



**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
Lead Integrity	MIL-STD-883, Method 2004
Solderability	MIL-STD-883, Method 2002
Temperature Cycling	MIL-STD-883, Method 1010
Resistance to Soldering Heat	MIL-STD-883, Method 210
Resistance to Solvents	MIL-STD-883, Method 215

MANUFACTURER ECLIPTEK CORP.	CATEGORY OSCILLATOR	SERIES EC28	PACKAGE 8 pin DIP	VOLTAGE 2.5V	CLASS 0554	REV. DATE 08/06
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