ECLIPTEK® CORPORATION

Marketing Bulletin

DATE: April 20th, 2010

TO: All Sales Personnel

FROM: Isaac Gonzalez

RE: Product Termination

To all concerned parties,

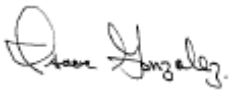
This bulletin is to notify all customers of the discontinuation of the following Ecliptek series effective April 20th, 2010:

Series	Description	Recommended Replacement
EC32	RoHS Compliant (Pb-free) 5.0V 14 Pin DIP Metal Thru-Hole HCMOS/TTL VCXO	EMVA13
EC32HS	RoHS Compliant (Pb-free) 5.0V 8 Pin DIP Metal Thru-Hole HCMOS/TTL VCXO	EMVA13

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 1st, 2010, with delivery to conclude by December 1st, 2010.

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

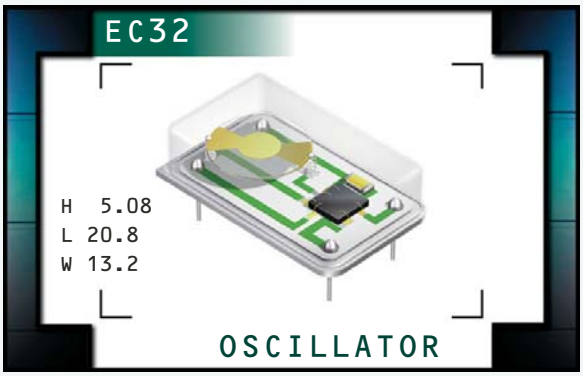
Best Regards,



Isaac Gonzalez
Configuration Manager
Ecliptek Corporation

EC32 Series

- Voltage Controlled Crystal Oscillators (VCXO)
- CMOS/TTL Output
- +3.3V Supply Voltage
- External Voltage Control Function
- Custom Lead Length & Gull Wing Options
- 14 pin DIP Metal Package
- RoHS Compliant (Pb-free)



NOTES

ELECTRICAL SPECIFICATIONS

Frequency Range (MHz)		1.000MHz to 44.736MHz
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_{DD})		3.3V_{DC} ±10%
Aging (at 25°C)		±5ppm / year Maximum
Load Drive Capability		2TTL Load or 15pF LVCMOS Load Maximum
Start Up Time		10 mSeconds Maximum
Frequency Deviation /	1.65V_{DC} ±1.65V_{DC} Positive Transfer Characteristic, or	±50ppm Minimum
Control Voltage	1.65V_{DC} ±1.65V_{DC} Positive Transfer Characteristic	±100ppm Minimum
Linearity		±20% Maximum, ±15% Maximum, or 10% Maximum
Input Current	1.000MHz to 20.000MHz	10mA Maximum
	20.001MHz to 44.736MHz	20mA Maximum
Frequency Tolerance / Stability	Inclusive of Operating Temperature Range, Supply Voltage, and Load	±100ppm, ±50ppm, ±25ppm, or ±20ppm Maximum (0°C to 70°C Only)
Output Voltage Logic High (V_{OH})	w/TTL Load	2.4V_{DC} Minimum
	w/LVCMOS Load	2.7V_{DC} Minimum
Output Voltage Logic Low (V_{OL})	w/TTL Load or w/LVCMOS Load	0.4V_{DC} Maximum
Duty Cycle	at 50% of Waveform	50 ±10(%) (Standard)
	at 50% of Waveform	50 ±5(%) (Optional)
Rise Time / Fall Time	0.4V_{DC} to 2.4V_{DC} w/TTL Load; 20% to 80% of Waveform w/LVCMOS Load	5 nSeconds Maximum
Period Jitter: Absolute		±100pSeconds Maximum
Period Jitter: One Sigma		±25pSeconds Maximum

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EC32	14 pin DIP	3.3V	OS46	08/06

PART NUMBERING GUIDE

EC32 00 T A 15 ET - 24.000M - G

FREQUENCY TOLERANCE / STABILITY
00=±100ppm Maximum
45=±50ppm Maximum, 25=±25ppm Maximum
20=±20ppm Maximum

DUTY CYCLE
Blank=50 ±10(%), T=50 ±5(%)

FREQUENCY DEVIATION
Blank=±50ppm Minimum
A=±100ppm Minimum

AVAILABLE OPTIONS
Blank=None
CLXXX=Custom Lead Length
G=Full Size Gull Wing

FREQUENCY

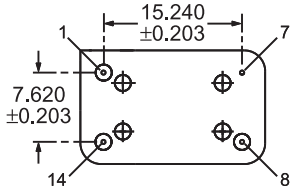
OPERATING TEMP. RANGE
Blank=0°C to 70°C
ET=-40°C to 85°C

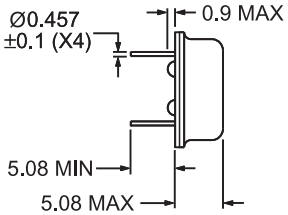
LINEARITY
Blank=20% Maximum
15=15% Maximum
10=10% Maximum

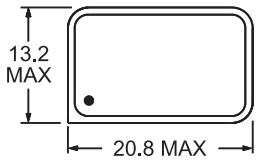
NOTES

MECHANICAL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS







Pin 1: Control Voltage (V_c)
Pin 7: Case Ground

Pin 8: Output
Pin 14: Supply Voltage

MARKING SPECIFICATIONS

Line 1: ECLIPTEK
Line 2: EC32
- Series Designator

Line 3: XX.XXX M
- Frequency in MHz (5 Digits Maximum + Decimal)

Line 4: XX Y ZZ
- Week of Year
- Last Digit of Year
- Ecliptek Manufacturing Identifier

Note: Pin 1 shall be designated with a dot

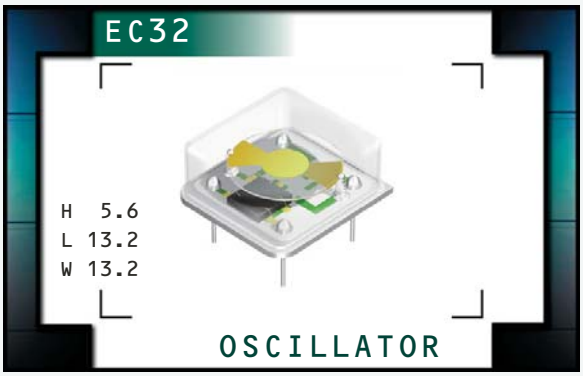
ENVIRONMENTAL/MECHANICAL SPECIFICATIONS

Characteristic	Specification
Seal Integrity	Bubble test in Perfluorocarbon at +125°C ±5°C for 60 seconds minimum.
Solderability	Sn63 Solder dip at +230°C ±5°C for 5 seconds/95% coverage.
Marking Permanency	10 Strokes with brush after 1 minute soak in solvent, 3 times.
Shock	Random drop on hard wooden plate 3 times from a height of 20cm.
Vibration	Frequency with an amplitude of 1.5mm sweeping between 10Hz to 55Hz within 1 minute (approximately) for 2 hours minimum on each axis (X, Y and Z) for a total of 6 hours.

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EC32	14 pin DIP	3.3V	OS46	08/06

EC32 Series

- Voltage Controlled Crystal Oscillators (VCXO)
- CMOS/TTL Output
- +3.3V Supply Voltage
- External Voltage Control Function
- Custom Lead Length & Gull Wing Options
- 8 pin DIP Metal Package
- RoHS Compliant (Pb-free)



NOTES

ELECTRICAL SPECIFICATIONS

Frequency Range (MHz)		1.000MHz to 44.736MHz
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_{DD})		3.3V_{DC} ±10%
Aging (at 25°C)		±5ppm / year Maximum
Load Drive Capability		2TTL Load or 15pF LVCMOS Load Maximum
Start Up Time		10 mSeconds Maximum
Frequency Deviation /	1.65V_{DC} ±1.65V_{DC} Positive Transfer Characteristic, or	±50ppm Minimum
Control Voltage	1.65V_{DC} ±1.65V_{DC} Positive Transfer Characteristic	±100ppm Minimum
Linearity		±20% Maximum, ±15% Maximum, or 10% Maximum
Input Current	1.000MHz to 20.000MHz	10mA Maximum
	20.001MHz to 44.736MHz	20mA Maximum
Frequency Tolerance / Stability	Inclusive of Operating Temperature	±100ppm, ±50ppm, ±25ppm, or
	Range, Supply Voltage, and Load	±20ppm Maximum (0°C to 70°C Only)
Output Voltage Logic High (V_{OH})	w/TTL Load	2.4V_{DC} Minimum
	w/LVCMOS Load	2.7V_{DC} Minimum
Output Voltage Logic Low (V_{OL})	w/TTL Load or w/LVCMOS Load	0.4V_{DC} Maximum
Duty Cycle	at 50% of Waveform	50 ±10(%) (Standard)
	at 50% of Waveform	50 ±5(%) (Optional)
Rise Time / Fall Time	0.4V_{DC} to 2.4V_{DC} w/TTL Load;	5 nSeconds Maximum
	20% to 80% of Waveform w/LVCMOS Load	
Period Jitter: Absolute		±100pSeconds Maximum
Period Jitter: One Sigma		±25pSeconds Maximum

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EC32	8 pin DIP	3.3V	OS47	08/06

PART NUMBERING GUIDE

EC32 00 HS T A 15 ET - 24.000M - G TR

FREQUENCY TOLERANCE / STABILITY
00=±100ppm Maximum
45=±50ppm Maximum, 25=±25ppm Maximum
20=±20ppm Maximum

PACKAGE
HS=Half Size 8 Pin DIP

DUTY CYCLE
Blank=50 ±10(%), T=50 ±5(%)

FREQUENCY DEVIATION
Blank=±50ppm Minimum
A=±100ppm Minimum

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

AVAILABLE OPTIONS
Blank=None (Standard)
CLXXX=Custom Lead Length
G=Half Size Gull Wing
G2=Alternate Half Size Gull Wing

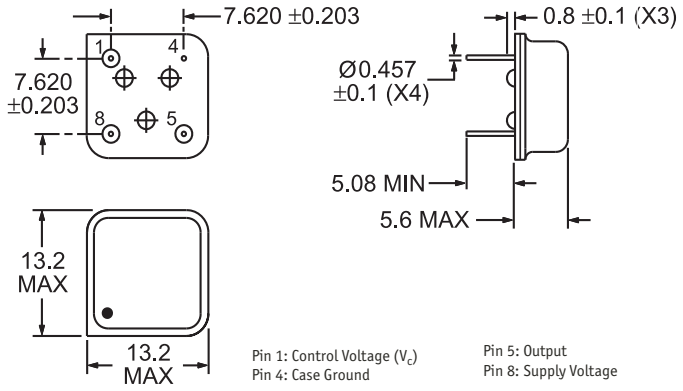
FREQUENCY

OPERATING TEMP. RANGE
Blank=0°C to 70°C
ET=-40°C to 85°C

LINEARITY
Blank=20% Maximum
15=15% Maximum, 10=10% Maximum

MECHANICAL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS

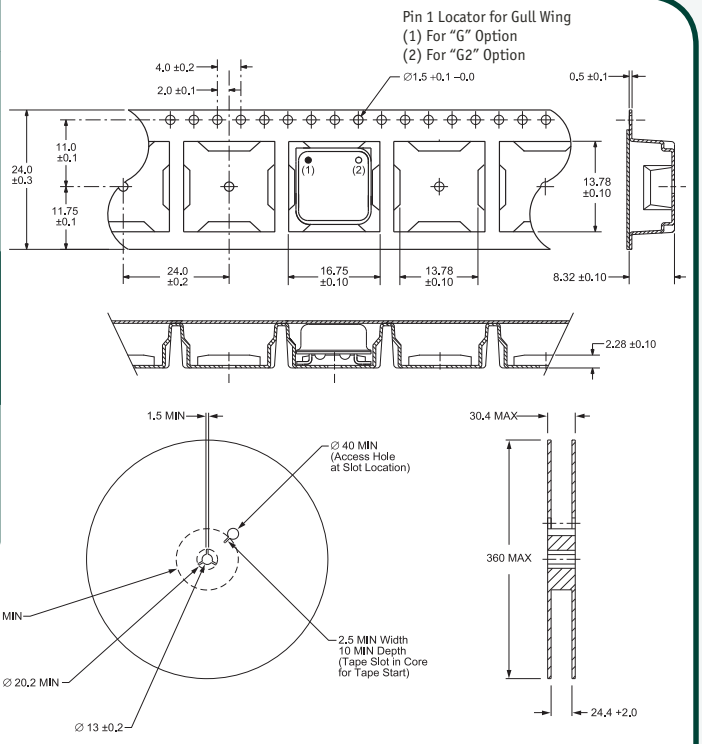


Pin 1: Control Voltage (V_C)
Pin 4: Case Ground

Pin 5: Output
Pin 8: Supply Voltage

TAPE AND REEL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS



250 Pieces Per Reel
Compliant to EIA-481A

MARKING SPECIFICATIONS

Line 1: ECLIPTEK
Line 2: EC32
- Series Designator

Line 3: XX.XXX M
- Frequency in MHz (5 Digits Maximum + Decimal)

Line 4: XX Y ZZ
- Week of Year
- Last Digit of Year
- Ecliptek Manufacturing Identifier

ENVIRONMENTAL/MECHANICAL SPECIFICATIONS

Characteristic	Specification
Seal Integrity	Bubble test in Perfluorocarbon at +125°C ±5°C for 60 seconds minimum.
Solderability	Sn63 Solder dip at +230°C ±5°C for 5 seconds/95% coverage.
Marking Permanency	10 Strokes with brush after 1 minute soak in solvent, 3 times.
Shock	Random drop on hard wooden plate 3 times from a height of 20cm.
Vibration	Frequency with an amplitude of 1.5mm sweeping between 10Hz to 55Hz within 1 minute (approximately) for 2 hours minimum on each axis (X, Y and Z) for a total of 6 hours.

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EC32	8 pin DIP	3.3V	OS47	08/06