ECLIPTEK® CORPORATION

Marketing Bulletin

DATE: September 20th, 2006

TO: All Sales Personnel

FROM: Isaac Gonzalez

RE: Product Termination

To all concerned parties,

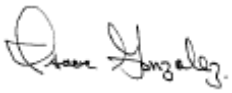
This bulletin is to notify all customers of the discontinuation of the following Ecliptek series effective September 20th, 2006:

Series	Description	Recommended Replacement
EC14	5V 4 pad SMD Plastic Oscillator	EP14 or EH14

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 March 31st, 2007, with delivery to conclude by September 30th, 2007.

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

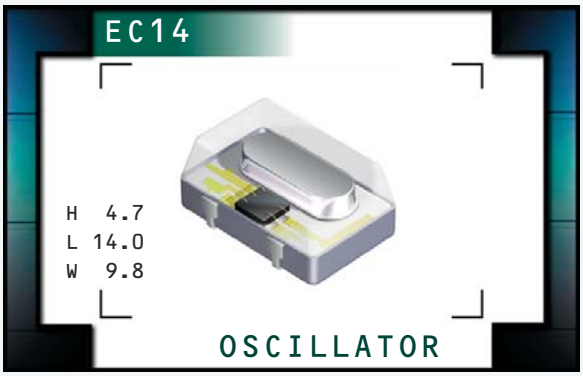
Best Regards,



Isaac Gonzalez
Configuration Manager
Ecliptek Corporation

EC14 Series

- Plastic surface mount package
- 5.0V supply voltage
- HCMOS/TTL output
- Stability to ±50ppm
- Available on tape and reel



OBSOLETE

ELECTRICAL SPECIFICATIONS

Frequency Range (MHz)		1.000MHz to 66.667MHz
Operating Temperature Range		0°C to 70°C or -40°C to 85°C (≤30.000MHz)
Storage Temperature Range		-55°C to 125°C
Supply Voltage (V_{DD})		5.0V_{DC} ±10%
Frequency Tolerance / Stability*	Inclusive of Operating Temperature Range, Supply Voltage, and Load	±100ppm Maximum or ±50ppm Maximum (0°C to 70°C Only)
Input Current	≤30.000MHz	23mA Maximum (Unloaded)
	30.001MHz to 50.000MHz	35mA Maximum (Unloaded)
	>50.000MHz	50mA Maximum (Unloaded)
Load Drive Capability	≤53.125MHz	10TTL Load or 50pF HCMOS Load
	>53.125MHz	15pF HCMOS Load
Output Voltage Logic High (V_{OH})	w/TTL Load	2.4V_{DC} Minimum I_{OH} = -16mA
	w/HCMOS Load	V_{DD}-0.5V_{DC} Minimum I_{OH} = -16mA
Output Voltage Logic Low (V_{OL})	w/TTL Load	0.4V_{DC} Maximum I_{OL} = +16mA
	w/HCMOS Load	0.5V_{DC} Maximum I_{OL} = +16mA
Duty Cycle	at 50% of waveform w/HCMOS Load at 1.4V_{DC} w/TTL Load	50 ±10(%) (Standard)
	at 1.4V_{DC} w/HCMOS Load or w/TTL Load	50 ±5(%) (Optional)
Rise Time / Fall Time	20% to 80% of waveform w/HCMOS Load; 0.4V_{DC} to 2.4V_{DC} w/TTL Load	8 nSeconds Maximum
Aging (at 25°C)		±5ppm / year Maximum
Tri-State Input Voltage	No Connection	Enables Output
	V_{IH} :≥2.0V_{DC}	Enables Output
	V_{IL} :≤0.8V_{DC}	Disables Output: High Impedance
Start Up Time	1.000MHz to 26.000MHz	4 mSeconds Maximum
	26.001MHz to 66.667MHz	10 mSeconds Maximum
Period Jitter: Absolute		±100pSeconds Maximum
Period Jitter: One Sigma		±25pSeconds Maximum

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EC14	PLASTIC	5.0V	OS33	08/06

PART NUMBERING GUIDE

EC14 00 SJ ET T TS - 25.000M TR

FREQUENCY TOLERANCE / STABILITY
00=±100ppm Maximum (Standard)
45=±50ppm Maximum

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

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

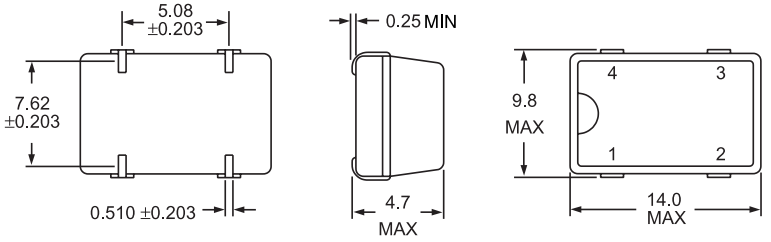
PACKAGING OPTIONS
Blank=Bulk
TR=Tape and Reel (Standard)

FREQUENCY

OUTPUT CONTROL FUNCTION
TS=Tri-State Enable High

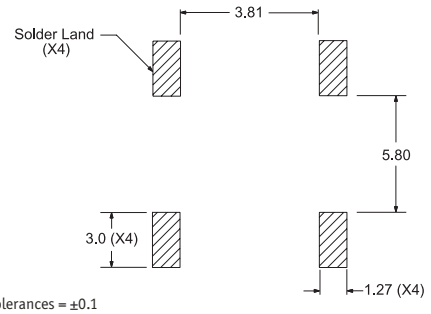
OBSOLETE

MECHANICAL DIMENSIONS
ALL DIMENSIONS IN MILLIMETERS



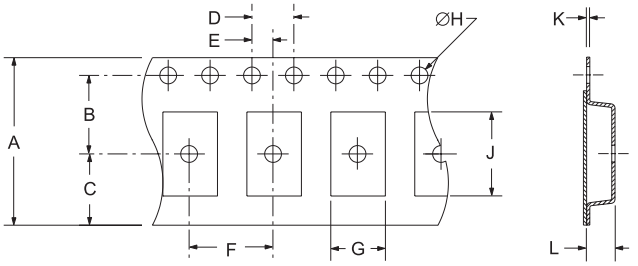
Pin 1: Tri-State
Pin 2: Case Ground
Pin 3: Output
Pin 4: Supply Voltage

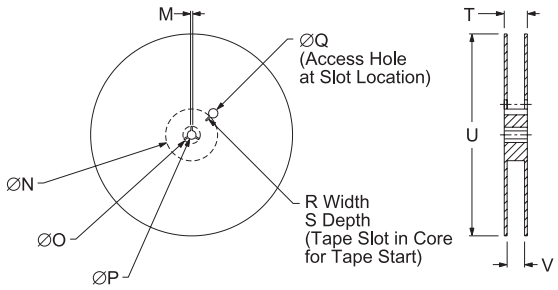
SUGGESTED SOLDER PAD LAYOUT
ALL DIMENSIONS IN MILLIMETERS



Tolerances = ±0.1

TAPE AND REEL DIMENSIONS
ALL DIMENSIONS IN MILLIMETERS





TAPE	A	B	C	D	E
	24 ±.3	11.5 ±.1	10.75 ±.1	4 ±.2	2±.1
F	G	H	J	K	L
12 ±.2	B0*	1.5 +.1-0	A0*	.3 ±.1	K0*

*Compliant to EIA 481A

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	30.4 MAX	360 MAX	24.4+2-0	1,000

ENVIRONMENTAL/MECHANICAL SPECIFICATIONS

Characteristic	Specification
Seal Integrity	Bubble test in Perfluorocarbon at +125°C ±5°C for 60 seconds minimum (internal crystal only).
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.

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	SERIES	PACKAGE	VOLTAGE	CLASS	REV - DATE
ECLIPTEK CORP.	OSCILLATOR	EC14	PLASTIC	5.0V	OS33	08/06