

Marketing Bulletin

DATE: September 20th, 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 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.

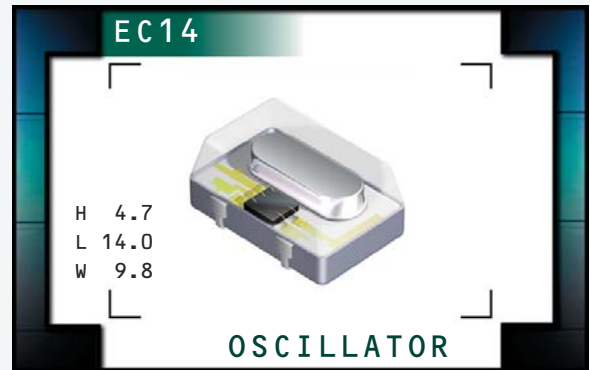
Best Regards,



Mark W. Stoner
Vice President of Marketing
Ecliptek Corporation

EC14 Series

- Plastic surface mount package
- 5.0V supply voltage
- HCMOS/TTL output
- Stability to ± 50 ppm
- 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 (≤ 30.000 MHz) |
| Storage Temperature Range | | -55°C to 125°C |
| Supply Voltage (V_{DD}) | | 5.0V _{DC} $\pm 10\%$ |
| Frequency Tolerance / Stability* | Inclusive of Operating Temperature Range, Supply Voltage, and Load | ± 100 ppm Maximum or ± 50 ppm Maximum (0°C to 70°C Only) |
| Input Current | ≤ 30.000 MHz 30.001MHz to 50.000MHz >50.000MHz | 23mA Maximum (Unloaded) 35mA Maximum (Unloaded) 50mA Maximum (Unloaded) |
| Load Drive Capability | ≤ 53.125 MHz >53.125MHz | 10TTL Load or 50pF HCMOS Load 15pF HCMOS Load |
| Output Voltage Logic High (V_{OH}) | w/TTL Load w/HCMOS Load | 2.4V _{DC} Minimum $I_{OH} = -16$ mA $V_{DD} - 0.5V_{DC}$ Minimum $I_{OH} = -16$ mA |
| Output Voltage Logic Low (V_{OL}) | w/TTL Load w/HCMOS Load | 0.4V _{DC} Maximum $I_{OL} = +16$ mA 0.5V _{DC} Maximum $I_{OL} = +16$ mA |
| Duty Cycle | at 50% of waveform w/HCMOS Load at 1.4V _{DC} w/TTL Load at 1.4V _{DC} w/HCMOS Load or w/TTL Load | 50 ± 10 (%) (Standard) 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) | | ± 5 ppm / year Maximum |
| Tri-State Input Voltage | No Connection $V_{IH} : \geq 2.0V_{DC}$ $V_{IL} : \leq 0.8V_{DC}$ | Enables Output Enables Output Disables Output: High Impedance |
| Start Up Time | 1.000MHz to 26.000MHz 26.001MHz to 66.667MHz | 4 mSeconds Maximum 10 mSeconds Maximum |
| Period Jitter: Absolute | | ± 100 ppSeconds Maximum |
| Period Jitter: One Sigma | | ± 25 ppSeconds Maximum |

PART NUMBERING GUIDE

EC14 00 SJ ET 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)

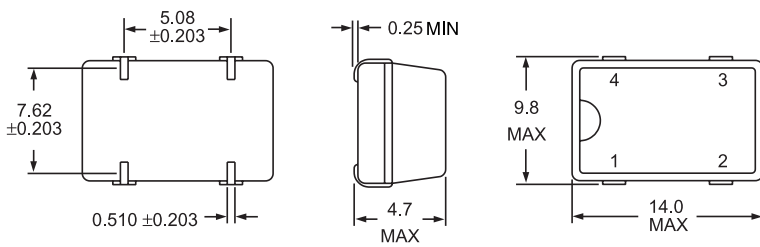
FREQUENCY

OUTPUT CONTROL FUNCTION

TS=Tri-State Enable High

OBSOLETE

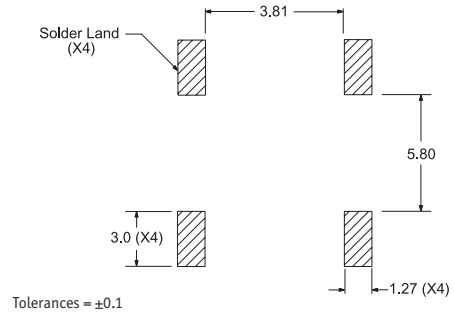
MECHANICAL DIMENSIONS
ALL DIMENSIONS IN MILLIMETERS



Pin 1: Tri-State
Pin 2: Case Ground

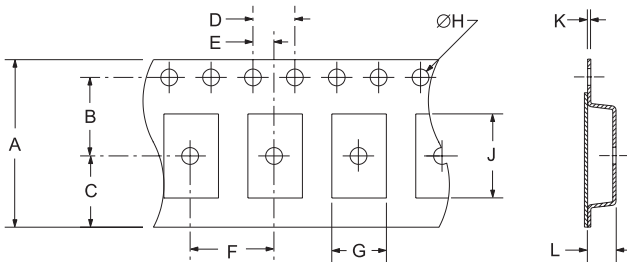
Pin 3: Output
Pin 4: Supply Voltage

SUGGESTED SOLDER PAD LAYOUT
ALL DIMENSIONS IN MILLIMETERS



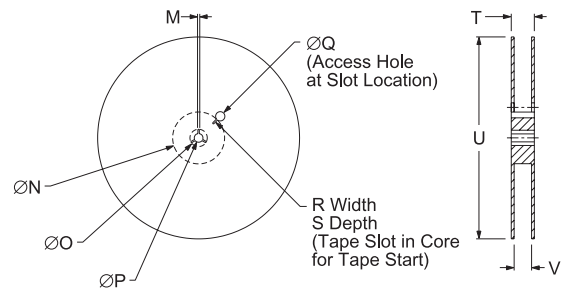
Tolerances = ±0.1

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 |