

Product EOL Announcement

The Product EOL Announcement signifies that a product series has entered the final phase of the Ecliptek Product Life Cycle, and serves as advance notice of product termination per the Ecliptek End of Life (EOL) policy.

Ecliptek Corporation announces End of Life initiation for the following product series with the intent of discontinuing its availability.

| EOL Series | Description |
|------------|---|
| EL15D8 | RoHS Compliant (Pb-free) 6 Pad 5mm x 7mm Ceramic SMD 2.5Vdc LVDS Oscillator |

EOL Timeline

The last date Ecliptek will accept orders (Stage 2) and the last date orders may be scheduled for shipment (Stage 3) are listed in the table below.

| Stage 1 EOL Announce Date | Stage 2 Last Date to Order | Stage 3 Last Date to Ship |
|------------------------------|-------------------------------|------------------------------|
| 17-February-2009 | 1-June-2009 | 30-September-2009 |

Alternative Products

In order to fulfill your requirements beyond this product's discontinuation, we invite you to evaluate the recommended alternative Ecliptek product series referenced below. Please click on the link to view the data sheet.

| Alternative Series | Description |
|------------------------|---|
| EL15C7 | RoHS Compliant (Pb-free) 2.5V 6 Pad 5mm x 7mm Ceramic SMD LVDS Oscillator |

Automated EOL Notification

Ecliptek offers automated notification of Product EOL Announcements. Place part numbers for which you'd like to receive EOL Notifications into your personalized [Parts List](#) on our website and we'll email you when EOL is announced.

Please do not hesitate to contact us if you have any questions or need further assistance.

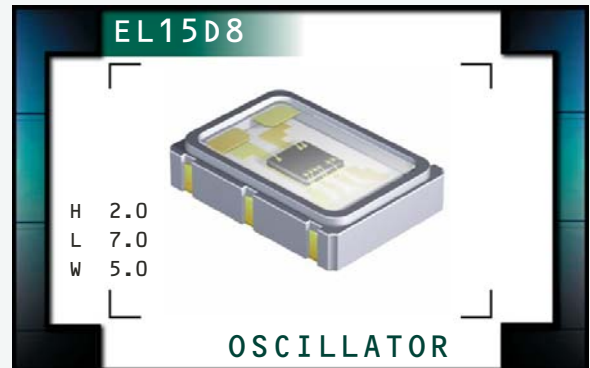
Ecliptek Global Customer Support Team
(800) 433-1280 x300
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EL15D8 Series



ECLIPTEK[®]
CORPORATION

- RoHS Compliant (Pb-Free)
- LVDS Output Oscillators
- 2.5V Supply Voltage
- Ceramic 6-pad SMD Package
- Stability to ± 25 ppm
- Tri-State Output
- Complementary Output
- Available on Tape and Reel
- Wide Range of Available Frequencies



OBSOLETE

ELECTRICAL SPECIFICATIONS

| | |
|---|--|
| Nominal Frequency | 75MHz, 77.76MHz, 80MHz, 100MHz, 106.25MHz, 125MHz, 150MHz, 155.52MHz, 156.25MHz, 159.375MHz, 187.5MHz, 212.5MHz, 250MHz, 311.04MHz, 312.5MHz |
| 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_{CC}) | 2.5V _{DC} $\pm 5\%$ |
| Input Current | With Load 85mA Maximum |
| Frequency Tolerance / Stability | Inclusive of All Conditions: Calibration Tolerance at 25°C, Frequency Stability over the Operating Temperature Range, Supply Voltage Change, Output Load Change, 1st Year Aging at 25°C, Shock, and Vibration ± 50 ppm Maximum, or ± 25 ppm Maximum |
| Output Voltage Logic High (V_{OH}) | 1.45V _{DC} Typical, 1.6V _{DC} Maximum |
| Output Voltage Logic Low (V_{OL}) | 1.1V _{DC} Typical, 0.9V _{DC} Minimum |
| V_{OD} Magnitude Change (${}_D V_{OD}$) | -50mV Minimum, +50mV Maximum |
| Differential Output Voltage (V_{OD}) | 247mV Minimum, 350mV Typical, 454mV Maximum |
| Offset Voltage (V_{OS}) | 1.125Vdc Minimum, 1.250Vdc Typical, 1.375Vdc Maximum |
| Rise Time / Fall Time | 20% to 80% of waveform 300pSec Typical, 600pSec Maximum |
| Duty Cycle | at 50% of waveform 50 ± 5 (%) |
| V_{OS} Magnitude Change (${}_D V_{OS}$) | -150mV Minimum, +150mV Maximum |
| Load Drive Capability | Between Output and Complementary Output 100 Ohms |
| Logic Control / Additional Output | Tri-State and Complementary Output |
| Tri-State Input Voltage | V_{IH} of 70% of V_{CC} Minimum No Connection V_{IL} of 30% of V_{CC} Maximum Enables Output Enables Output Disables Output: High Impedance |
| Standby Current | Disabled Output, High Impedance, Without Load 600 μ A Maximum |
| Start Up Time | 10 mSeconds Maximum |
| RMS Phase Jitter | FJ = 12kHz to 20MHz 0.7pSec Typical, 1 pSec Maximum |
| Typical Phase Noise | Fo=156.250MHz -60dBc/Hz at 10Hz Offset -90dBc/Hz at 100Hz Offset -115dBc/Hz at 1kHz Offset -129dBc/Hz at 10kHz Offset -130dBc/Hz at 100kHz Offset -131dBc/Hz at 1MHz Offset -148dBc/Hz at 10MHz Offset |

MANUFACTURER
ECLIPTEK CORP.

CATEGORY
OSCILLATOR

SERIES
EL15D8

PACKAGE
CERAMIC

VOLTAGE
2.5V

CLASS
OS4R

REV. DATE
10/07

PART NUMBERING GUIDE

EL15D8 D 2 F - 155.520M TR

**FREQUENCY TOLERANCE & STABILITY/
OPERATING TEMPERATURE RANGE**

C=±25ppm Maximum over 0°C to +70°C
 D=±50ppm Maximum over 0°C to +70°C
 G=±25ppm Maximum over -40°C to +85°C
 H=±50ppm Maximum over -40°C to +85°C

AVAILABLE OPTIONS

Blank=Tubes
 TR=Tape and Reel (Standard)

FREQUENCY

LOGIC CONTROL/ADDITIONAL OUTPUT

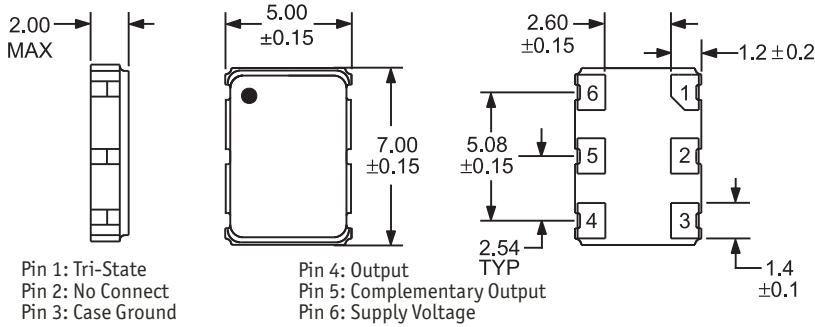
F=Tri-State and Complementary Output

DUTY CYCLE

2=50±5(%)

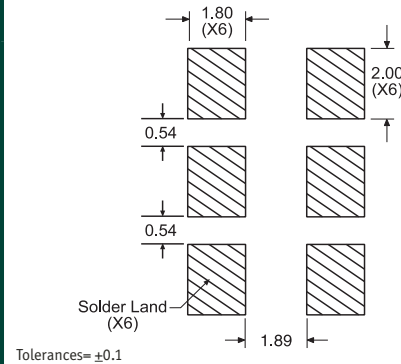
OBSOLETE

MECHANICAL DIMENSIONS
ALL DIMENSIONS IN MILLIMETERS

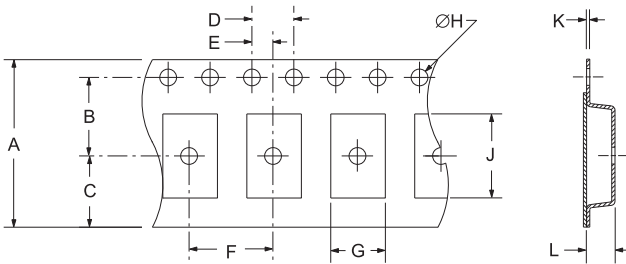


Pin 1: Tri-State
 Pin 2: No Connect
 Pin 3: Case Ground
 Pin 4: Output
 Pin 5: Complementary Output
 Pin 6: Supply Voltage

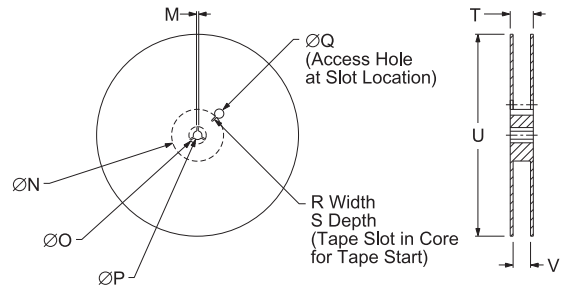
SOLDER PAD LAYOUT
DIMENSIONS IN MILLIMETERS



TAPE AND REEL DIMENSIONS
ALL DIMENSIONS IN MILLIMETERS



| TAPE | A | B | C | D | E |
|------|---------|-----------|---------|--------|------|
| | 16±.3-1 | 7.5±.1 | 6.75±.1 | 4 ±.1 | 2±.1 |
| F | G | H | J | K | L |
| 8±.1 | B0* | 1.5 +.1-0 | A0* | .3±.05 | K0* |



| 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 | 22.4 MAX | 360 MAX | 16.4+2-0 | 1,000 |

*Compliant to EIA 481A

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 |
| Solderability | MIL-STD-883, Method 2002 |
| Temperature Cycling | MIL-STD-883, Method 1010 |
| Resistance to Soldering Heat | MIL-STD-202, Method 210 |
| Resistance to Solvents | 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 | SERIES | PACKAGE | VOLTAGE | CLASS | REV. DATE |
|----------------|------------|--------|---------|---------|-------|-----------|
| ECLIPTEK CORP. | OSCILLATOR | EL15D8 | CERAMIC | 2.5V | OS4R | 10/07 |