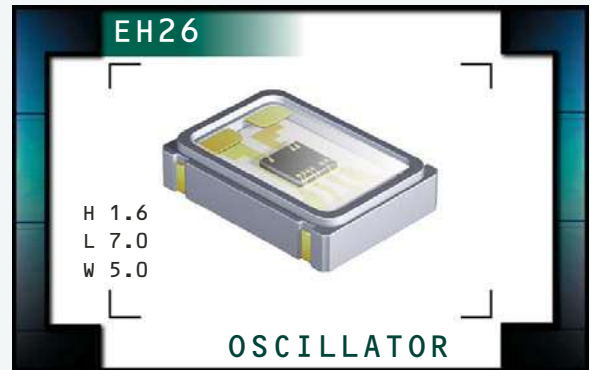


EH26 Series



ECLIPTEK[®]
CORPORATION

- RoHS Compliant (Pb-Free)
- Ceramic SMD package
- 3.3V supply voltage
- LVHCMOS output
- Stability to ± 20 ppm
- Available on tape and reel



NOTES

ELECTRICAL SPECIFICATIONS

| | | |
|--|---|--|
| Frequency Range | | 1.000MHz to 155.520MHz |
| 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} \pm 0.3V _{DC} |
| Input Current | | 35mA Maximum (Unloaded) |
| 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, First Year Aging at 25°C, Shock, and Vibration | ± 100 ppm, ± 50 ppm, ± 25 ppm, or ± 20 ppm Maximum |
| Output Voltage Logic High (V_{OH}) | | 2.7V _{DC} Minimum $I_{OH} = -8$ mA |
| Output Voltage Logic Low (V_{OL}) | | 0.5V _{DC} Maximum $I_{OL} = +8$ mA |
| Rise Time / Fall Time | ≤ 70.000 MHz 20% to 80% of Waveform w/HCMOS Load > 70.000 MHz 20% to 80% of Waveform w/HCMOS Load | 6 nSeconds Maximum 4 nSeconds Maximum |
| Load Drive Capability | ≤ 70.000 MHz > 70.000 MHz | 30pF HCMOS Load Maximum 15pF HCMOS Load Maximum |
| Duty Cycle (at $V_{DD} = 3.3V_{DC}$) | at 50% of Waveform | 50 \pm 10(%) (Standard) or 50 \pm 5(%) (Optional) |
| Tri-State Input Voltage | V_{IH} : No Connection or $\geq 2.2V_{DC}$ V_{IL} : $\leq 0.8V_{DC}$ | Enables Output Disables Output: High Impedance |
| Aging (at 25°C) | | ± 5 ppm / year Maximum |
| Start Up Time | | 10mSeconds Maximum |
| Period Jitter: Absolute | | ± 250 pSec Maximum, ± 100 pSec Typical |
| Period Jitter: One Sigma | | ± 50 pSec Maximum, ± 40 pSec Typical |

MANUFACTURER
ECLIPTEK CORP.

CATEGORY
OSCILLATOR

SERIES
EH26

PACKAGE
CERAMIC

VOLTAGE
3.3V

CLASS
OS48

REV. DATE
07/08

PART NUMBERING GUIDE

EH26 00 ET TS - 24.000M TR

FREQUENCY TOLERANCE / STABILITY

00=±100ppm Maximum (Standard), 45=±50ppm Maximum, 25=±25ppm Maximum, 20=±20ppm Maximum

OPERATING TEMP. RANGE

Blank=0°C to 70°C or
ET=-40°C to 85°C

DUTY CYCLE

Blank=50±10% (Standard)
T=50±5%

AVAILABLE OPTIONS

Blank=Bulk (Standard)
TR=Tape and Reel

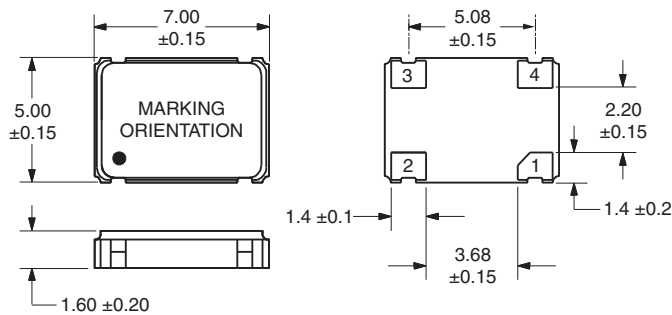
FREQUENCY

OUTPUT CONTROL FUNCTION

TS=Tri-State

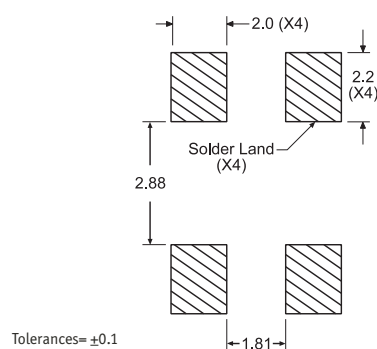
MECHANICAL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS



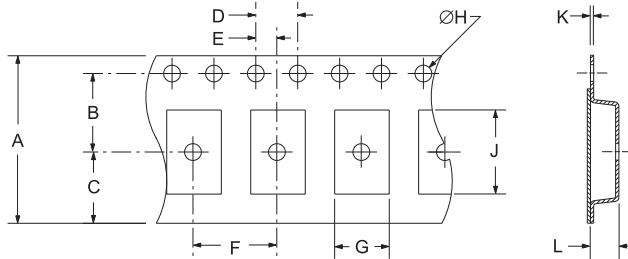
SUGGESTED SOLDER PAD LAYOUT

ALL DIMENSIONS IN MILLIMETERS

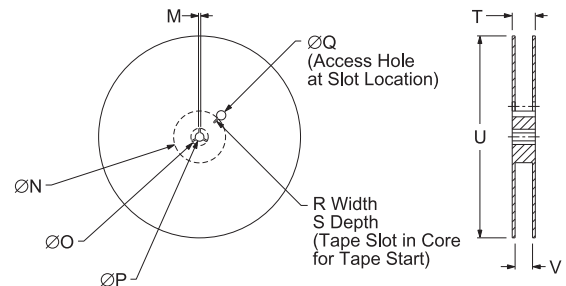


TAPE AND REEL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS



| REEL | 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 |
|------------------------------|---|
| ESD Susceptibility | MIL-STD-883, Method 3015, Class 1, HBM: 1500V |
| Fine Leak Test | MIL-STD-883, Method 1014, Condition A |
| Flammability | UL94-V0 |
| Gross Leak Test | MIL-STD-883, Method 1014, Condition C |
| Mechanical Shock | MIL-STD-883, Method 2002, Condition B |
| Moisture Resistance | MIL-STD-883, Method 1004 |
| Moisture Sensitivity | J-STD-020, MSL 1 |
| Resistance to Soldering Heat | MIL-STD-202, Method 210, Condition K |
| Resistance to Solvents | MIL-STD-202, Method 215 |
| Solderability | MIL-STD-883, Method 2003 |
| Temperature Cycling | MIL-STD-883, Method 1010, Condition B |
| Vibration | MIL-STD-883, Method 2007, Condition A |

MARKING SPECIFICATIONS

Line 1: ECLIPTEK

Line 2: XX.XXX M
Frequency in MHz (5 Digits Maximum + Decimal)

Line 3: P XX Y ZZ
 P: Week of Year
 XX: Last Digit of Year
 Y: Ecliptek Manufacturing Identifier
 ZZ: Configuration Designator

| MANUFACTURER | CATEGORY | SERIES | PACKAGE | VOLTAGE | CLASS | REV. DATE |
|----------------|------------|--------|---------|---------|-------|-----------|
| ECLIPTEK CORP. | OSCILLATOR | EH26 | CERAMIC | 3.3V | OS48 | 07/08 |