

New EP26 Series Alternative

We now offer a lower cost, quicker delivery alternative to the EP26 Series Oscillator (± 50 and ± 100 ppm only). Our new MEMS oscillator is available in 2 days for samples and 5 to 10 days for quantities up to 10,000 pcs. All frequencies from 1.000MHz to 125.000MHz are offered at the same low cost.

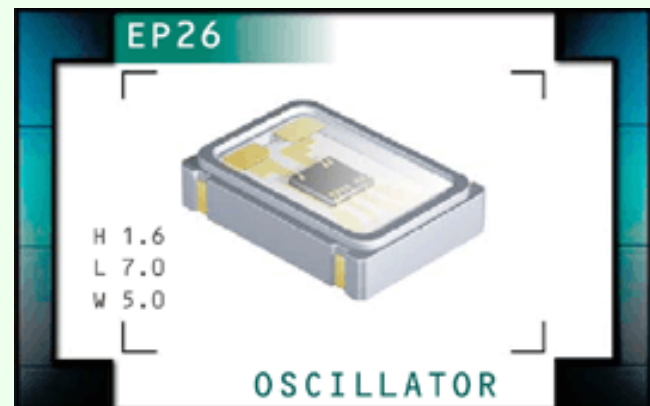
[Click here for the alternative EMK13 Series](#)

EP26 Series Programmable Oscillator

[Check Stock](#)
[Quote/Sample](#)



- RoHS Compliant (Pb-Free)
- EPO™ Programmable Oscillators
- Ceramic surface mount package
- LVHCMOS output
- 3.3V supply voltage
- Stability to ± 50 ppm
- Available on tape & reel



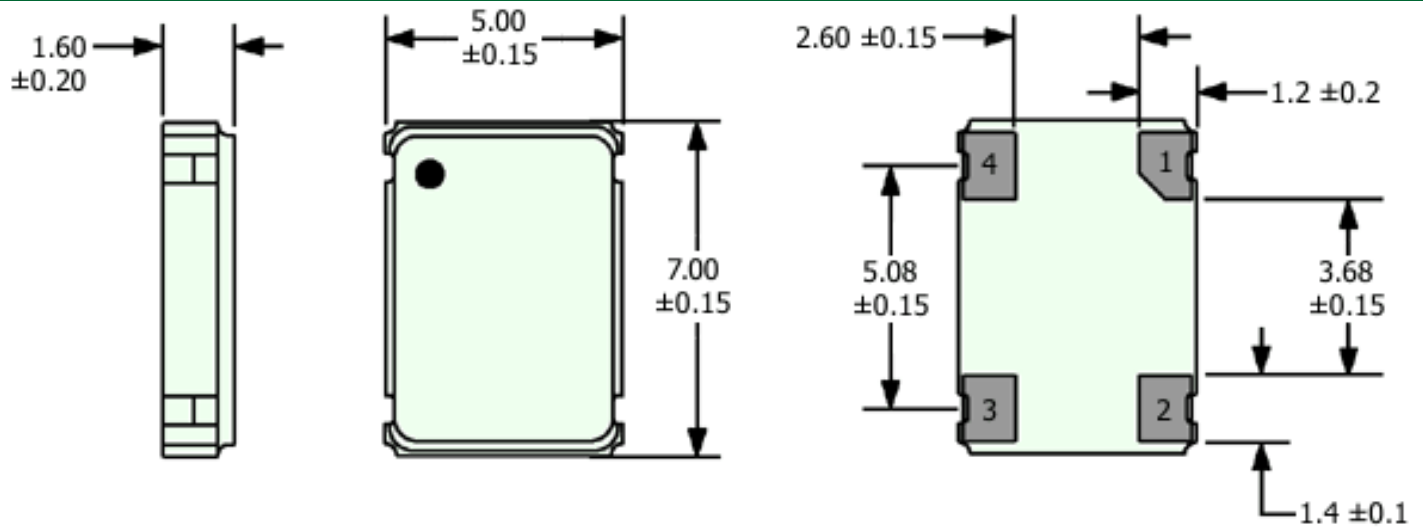
Electrical Specifications

⊕ Nominal Frequency	1.000MHz to 106.250MHz
⊕ 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 Maximum (Standard) ± 50 ppm Maximum
⊕ Operating Temperature Range	-20°C to +70°C (Standard) -40°C to +85°C

⊕ Supply Voltage (V_{DD})	$3.3V_{DC} \pm 0.3V_{DC}$
⊕ Input Current	28mA Maximum (Unloaded)
Disable Current (Tri-State Option)	16mA Maximum (Pin 1 = Ground)
Standby Current (Power Down Option)	20 μ A Maximum (Pin 1 = Ground)
⊕ Output Voltage Logic High (V_{OH})	$V_{DD} - 0.4V_{DC}$ Minimum ($I_{OH} = -8mA$)
⊕ Output Voltage Logic Low (V_{OL})	$0.4V_{DC}$ Maximum ($I_{OL} = +8mA$)
⊕ Duty Cycle	Measured at 50% of waveform. 50 \pm 10(%) (Standard) 50 \pm 5(%) (Optional) available from 1 to 50MHz
⊕ Rise Time/Fall Time	Measured from 20% to 80% of waveform. 4nSec Maximum
⊕ Load Drive Capability	30pF HCMOS Load Maximum from 1.000MHz to 50.000MHz 15pF HCMOS Load Maximum from 50.001MHz to 106.250MHz
⊕ Aging (at 25°C)	$\pm 5ppm/year$ Maximum
⊕ Storage Temperature	-55°C to +125°C
Output Control Function	Tri-State Enable High or Power Down
Input Voltage	70% of V_{DD} or greater or No Connection to enable output. 20% of V_{DD} or less to disable output (High Impedance State for Tri-State. Logic Low for Power Down).
Jitter	Absolute: $\pm 250pSec$ Maximum, $\pm 100pSec$ Typical less than or equal to 33MHz $\pm 125pSec$ Maximum, $\pm 75pSec$ Typical above 33MHz One Sigma: $\pm 50pSec$ Maximum less than or equal to 33MHz $\pm 40pSec$ Maximum greater than 33MHz
⊕ Start Up Time	10mSec Maximum



Mechanical Dimensions



All Dimensions in Millimeters

Pin 1: Power Down or Tri-State

Pin 2: Case Ground

Pin 3: Output

Pin 4: Supply Voltage

[Top of Page](#)



Part Number Constructor / Request a Quote or Sample

Please note that this form is intended to provide a listing of standard options. If you require an option or configuration that is not present here, you may want to fill out our [Custom Oscillator Part Number Request Form](#). If you have any trouble with this form, or just have a suggestion as to how it might be improved, please contact our [Webmaster](#).

Enter your part number:

- OR -

Frequency in Megahertz (1 to 106.25):

Frequency Tolerance/Stability:

Operating Temperature Range:

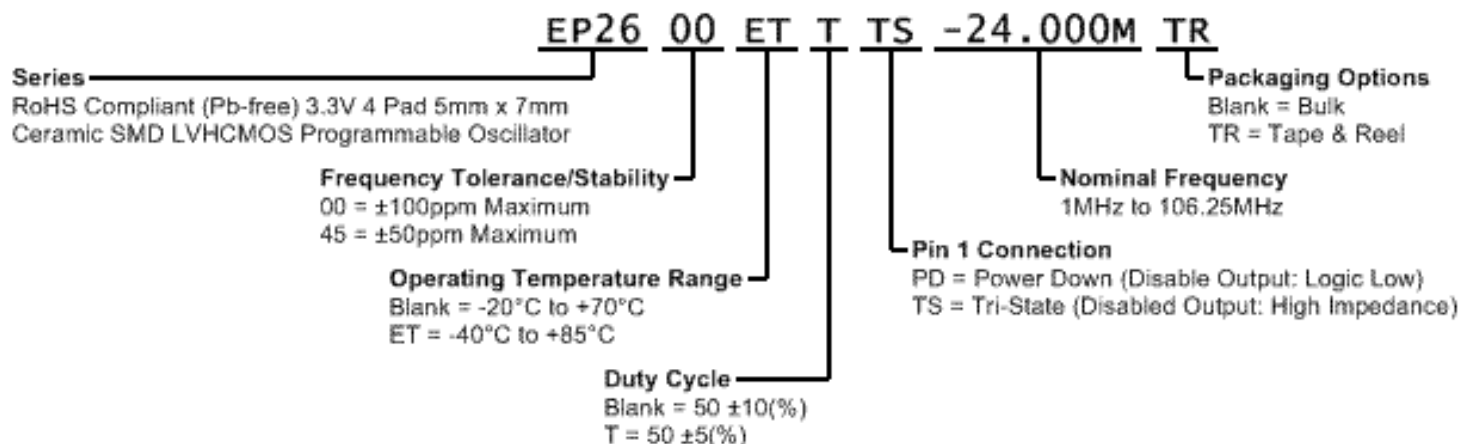
Duty Cycle:

Output Control Function:

Packaging Options:



Part Numbering Guide



Marking Specifications

Line 1: **ECLIPTEK**

Line 2: **XX.XXX M**

- XX.XXX = Frequency (5 Digits Maximum + Decimal)
- M = Frequency unit of measure (MHz)

Line 3: **P XX Y ZZ**

- P = Configuration Designator
- XX = Ecliptek Manufacturing Identifier
- Y = Last digit of Year
- ZZ = Week of Year



Environmental & Mechanical Specifications

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 2003
Temperature Cycling:	MIL-STD-883, Method 1010
Resistance to Soldering Heat:	MIL-STD-202, Method 210
Resistance to Solvents:	MIL-STD-202, Method 215

[Top of Page](#)



Other Resources

- [Frequently Asked Questions](#) about Programmable Oscillators
- [Download Specification \(PDF\)](#)
- [Test Circuit](#)
- [Recommended Solder Reflow Methods](#)
- [Recommended Solder Pad Layout](#)
- [Tape & Reel Packaging Option](#)
- [IBIS Model](#)
- [Oscillator Thermal Resistance](#)
- [Ecliptek RoHS Compliance Tools & Resources](#)

[Top of Page](#)

Category
Oscillator

Series
EP26

Package
Ceramic

Voltage
3.3V

Class
OS48

Revision
E 02-20-2004