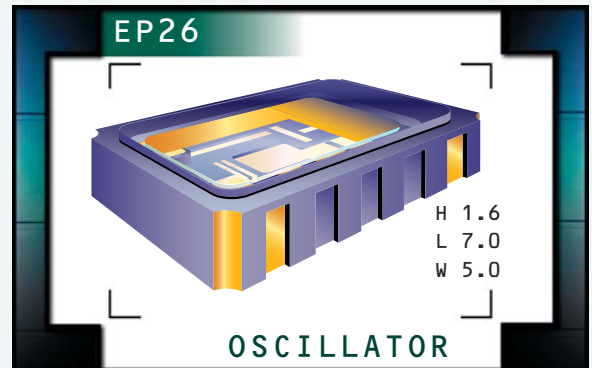


EP26 Series

- EPO™ Programmable Oscillators
- 3.3V supply voltage
- HCMOS output
- Ceramic surface mount package
- Stability to 50ppm
- Available on tape and reel



NOTES

ELECTRICAL SPECIFICATIONS

Frequency Range		1.000MHz to 106.250MHz
Operating Temperature Range		-20°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} ±0.3V _{DC}
Input Current		28mA Maximum (Unloaded)
Disable Current (TS Option)		16mA Maximum (Pin 1=Ground)
Standby Current (PD Option)		20µA Maximum (Pin 1=Ground)
Frequency Tolerance / Stability	Inclusive of Operating Temp Range, Supply Voltage, and Load	±100ppm or ±50ppm Maximum
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 $I_{OL}=+8mA$
Rise Time / Fall Time	20% to 80% of waveform	4 nSeconds Maximum
Duty Cycle	at 50% of waveform	50 ±10(%) (Standard)
	at 50% of waveform (≤50.000MHz Only)	50 ±5(%) (Optional)
Load Drive Capability	≤50.000MHz	30pF HCMOS Load Maximum
	>50.000MHz	15pF HCMOS Load Maximum
Output Control Function	TS	Tri-State
	PD	Power Down
Output Control Function Input Voltage	V_{IH} : No Connection or ≥70% of V_{DD}	Enables Output
	V_{IL} : (TS Option) ≤20% of V_{DD}	Disable Output: High Impedance
	V_{IL} : (PD Option) ≤20% of V_{DD}	Disable Output: Logic Low
Aging (at 25°C)		±5ppm / year Maximum
Start Up Time		10 mSeconds Maximum
Period Jitter: Absolute	≤33.000MHz	±250pSec Max, ±100pSec Typical
	>33.000MHz	±125pSec Max, ±75pSec Typical
Period Jitter: One Sigma	≤33.000MHz	±50pSeconds Maximum
	>33.000MHz	±40pSeconds Maximum

PART NUMBERING GUIDE

EP26 00 ET TS - 24.000M TR

FREQUENCY TOLERANCE / STABILITY

00=±100ppm Maximum (Standard)
45=±50ppm Maximum

OPERATING TEMP. RANGE

Blank=-20°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

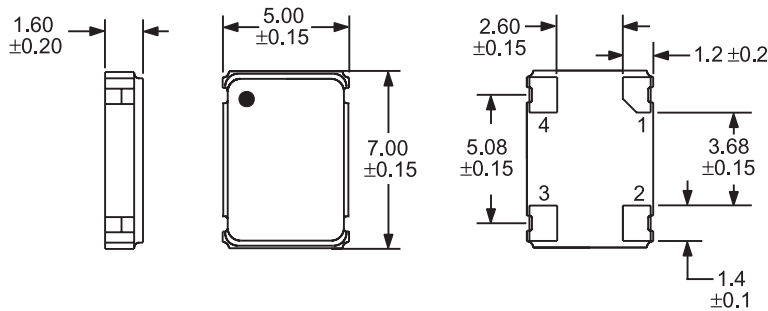
FREQUENCY

OUTPUT CONTROL FUNCTION

TS=Tri-State
PD=Power Down

MECHANICAL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS

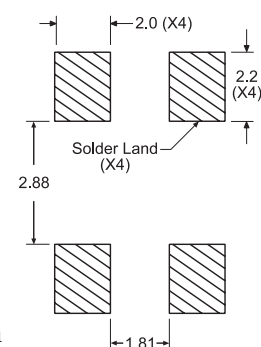


Pin 1: Tri-State or Power Down
Pin 2: Case Ground

Pin 3: Output
Pin 4: Supply Voltage

SUGGESTED SOLDER PAD LAYOUT

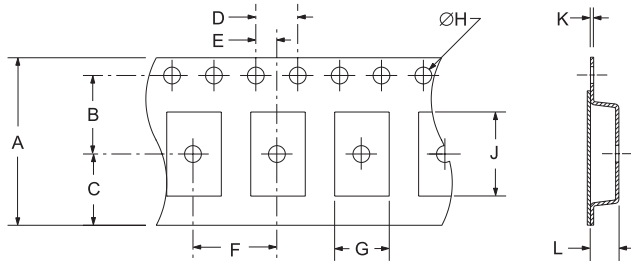
ALL DIMENSIONS IN MILLIMETERS



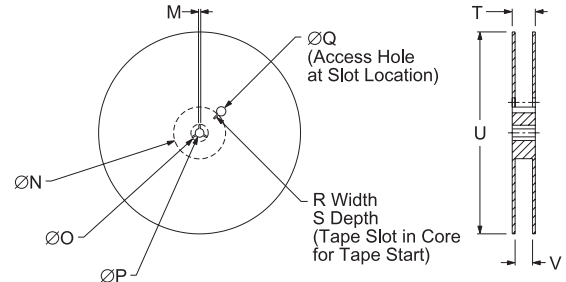
Tolerances = ±0.1

TAPE AND REEL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS



TAPE	A	B	C	D	E
	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
Seal Integrity	Bubble test in Perfluorocarbon at +125°C ±5°C for 60 seconds minimum.
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 50cm.
Thermal Shock	300 Cycles from -55°C to +125°C, 5 minute dwell.

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	EP26	CERAMIC	3.3V	OS48	03/02