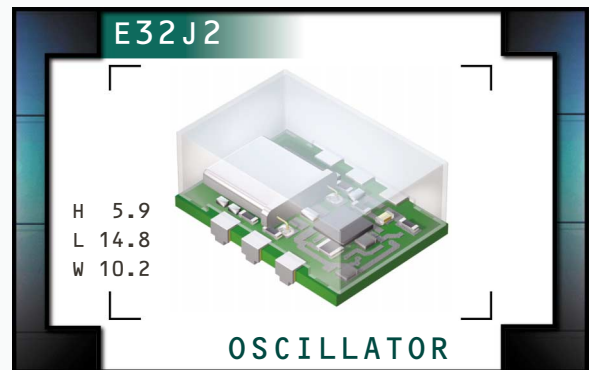


E32J2 Series

- PECL Output VCXO
- 3.3V supply voltage
- 6 pad PCB SMD package with J-leads
- Stability to 20ppm
- Output Enable/Disable available
- Complementary Output available
- Available on Tape and Reel



ELECTRICAL SPECIFICATIONS

Frequency Range		19.440MHz to 180.000MHz
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})		3.3V _{DC} ±5%
Input Current		75mA Maximum
Logic Type		100KH
Frequency Tolerance / Stability		Inclusive of Operating Temp Range, Supply Voltage, Load, and Aging @25°C over 10 years ±50ppm, ±25ppm, or ±20ppm Maximum
Output Voltage Logic High (V_{OH})		$V_{CC}-1.025V_{DC}$ Minimum
Output Voltage Logic Low (V_{OL})		$V_{CC}-1.620V_{DC}$ Maximum
Rise Time / Fall Time		20% to 80% of waveform 2 nSeconds Maximum
Duty Cycle		at 50% of waveform 50 ±10(%) 50 ±5(%)
Load Drive Capability		50 Ohms into $V_{CC}-2.0V_{DC}$
Additional Output / Logic Control		No Connect and Single Output Enable/Disable and Single Output No Connect and Complementary Output or Enable/Disable and Complementary Output
Enable/Disable Input Voltage		V_{IL} of $V_{CC}-1.475V_{DC}$ Maximum No Connection V_{IH} of $V_{CC}-1.165V_{DC}$ Minimum Enables Output Enables Output Disables Output: Logic Low Disables Complementary Output: Logic High
Start Up Time		10 mSeconds Maximum
RMS Phase Jitter		FJ = 12kHz to 20MHz 1 pSec Maximum
Absolute Pull Range (APR)		Inclusive of Operating Temp Range, Supply Voltage, Load, and Aging @25°C over 10 years ±50ppm Minimum
Linearity		20%, 15%, or 10% Maximum
Control Voltage (V_C): Test Conditions for APR		1.65V _{DC} ±1.35V _{DC}
Control Voltage Range (V_{CR})		0.0V _{DC} to V_{CC}
Center Control Voltage		1.65V _{DC}
Transfer Function		Positive Transfer Characteristic
Input Impedance		50kOhms Typical
Modulation Bandwidth		at -3dB with Control Voltage of +1.65V _{DC} 10kHz Minimum

PART NUMBERING GUIDE

E32J2 F 3 A 2 C - 155.520M TR

FREQUENCY TOLERANCE & STABILITY/ OPERATING TEMPERATURE RANGE

D=±50ppm Maximum over 0°C to +70°C
E=±25ppm Maximum over 0°C to +70°C
F=±20ppm Maximum over 0°C to +70°C
H=±50ppm Maximum over -40°C to +85°C

APR

3=±50ppm Minimum

LINEARITY

A=20%
B=15%
C=10%

AVAILABLE OPTIONS

Blank=Tubes
TR = Tape and Reel (Standard)

FREQUENCY

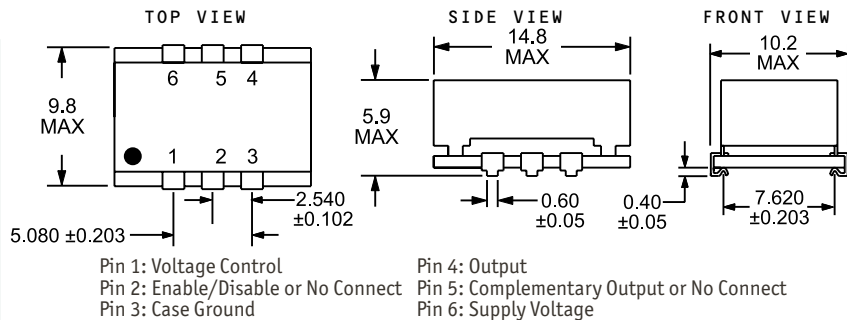
ADDITIONAL OUTPUT

A=No Connect and Single Output
B=Enable/Disable and Single Output
C=No Connect and Complementary Output
D=Enable/Disable and Complementary Output

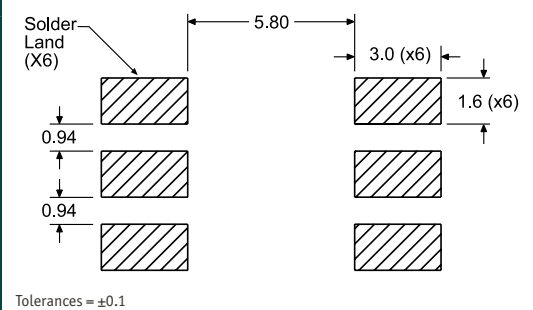
DUTY CYCLE

1=50 ±10(%), 2=50 ±5(%)

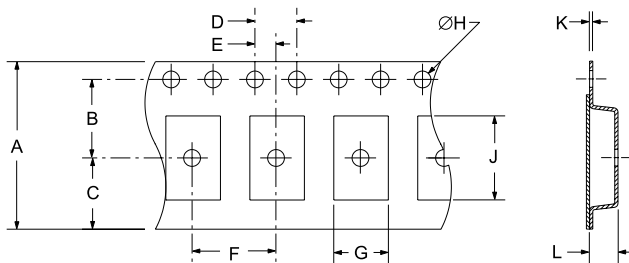
MECHANICAL DIMENSIONS ALL DIMENSIONS IN MILLIMETERS



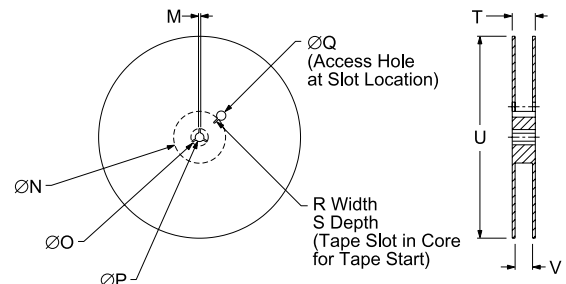
SUGGESTED SOLDER PAD LAYOUT ALL DIMENSIONS IN MILLIMETERS



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 ±1	B0*	1.5 ±1-0	A0*	.4 ±.05



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

*Compliant to EIA 481A

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
Eclipse Manufacturing Identifier

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	E32J2	6-PCB-J	3.3V	0573	11/01