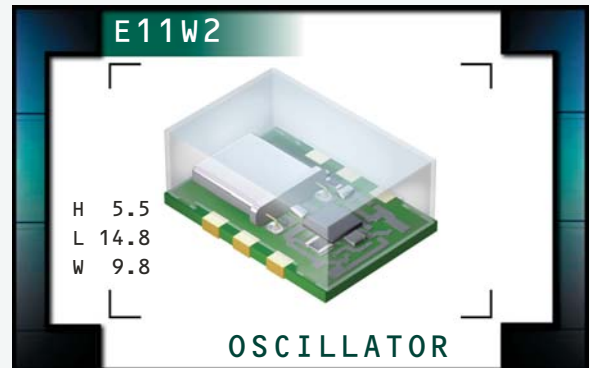


# E11W2 Series

- PECL Output Oscillators
- 5.0V supply voltage
- 6 pad PCB SMD package
- Stability to 20ppm
- Output Enable/Disable available
- Complementary Output available
- Available on Tape and Reel



## NOTES

### ELECTRICAL SPECIFICATIONS

<b>Frequency Range</b>		19.440MHz to 212.500MHz
<b>Operating Temperature Range</b>		0°C to 70°C or -40°C to 85°C
<b>Storage Temperature Range</b>		-55°C to 125°C
<b>Supply Voltage (V<sub>CC</sub>)</b>		5.0V <sub>DC</sub> ±5%
<b>Input Current</b>		100mA Maximum
<b>Logic Type</b>		100KH
<b>Frequency Tolerance / Stability</b>	Inclusive of Operating Temp Range, Supply Voltage, Load, and Aging @25°C over 10 years	±100ppm, ±50ppm, ±25ppm, or ±20ppm Maximum
<b>Output Voltage Logic High (V<sub>OH</sub>)</b>		V <sub>CC</sub> -1.025V <sub>DC</sub> Minimum
<b>Output Voltage Logic Low (V<sub>OL</sub>)</b>		V <sub>CC</sub> -1.620V <sub>DC</sub> Maximum
<b>Rise Time / Fall Time</b>	20% to 80% of waveform	2 nSeconds Maximum
<b>Duty Cycle</b>	at 50% of waveform	50 ±10(%) 50 ±5(%)
<b>Load Drive Capability</b>		50 Ohms into V <sub>CC</sub> -2.0V <sub>DC</sub>
<b>Logic Control / Additional Output</b>		No Connect, Enable/Disable, Complementary Output, or Complementary Output and Enable/Disable
<b>Enable/Disable Input Voltage</b>	V <sub>IL</sub> of V <sub>CC</sub> -1.475V <sub>DC</sub> Maximum No Connection V <sub>IH</sub> of V <sub>CC</sub> -1.165V <sub>DC</sub> Minimum	Enables Output Enables Output Disables Output: Logic Low Disables Complementary Output: Logic High
<b>Start Up Time</b>		10 mSeconds Maximum
<b>RMS Phase Jitter</b>	FJ = 12kHz to 20MHz	1 pSec Maximum

MANUFACTURER ECLIPTEK CORP.	CATEGORY OSCILLATOR	SERIES E11W2	PACKAGE 6-PCB	VOLTAGE 5.0V	CLASS 0S78	REV. DATE 03/02
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# PART NUMBERING GUIDE

## E11W2 F 2 C - 155.520M TR

### FREQUENCY TOLERANCE & STABILITY/ OPERATING TEMPERATURE RANGE

C=±100ppm Maximum over 0°C to +70°C  
 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  
 G=±100ppm Maximum over -40°C to +85°C  
 H=±50ppm Maximum over -40°C to +85°C

### DUTY CYCLE

1=50% ±10%, 2=50% ±5%

### AVAILABLE OPTIONS

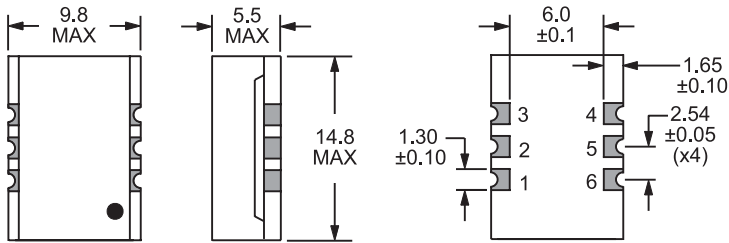
Blank=Tubes  
 TR=Tape and Reel (Standard)

### FREQUENCY

### LOGIC CONTROL/ADDITIONAL OUTPUT

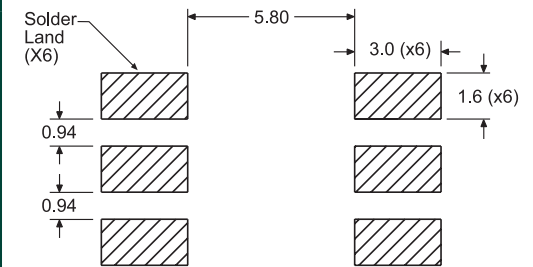
A=No Connect  
 B=Enable/Disable  
 C=Complementary Output  
 D=Complementary Output and Enable/Disable

### MECHANICAL DIMENSIONS ALL DIMENSIONS IN MILLIMETERS



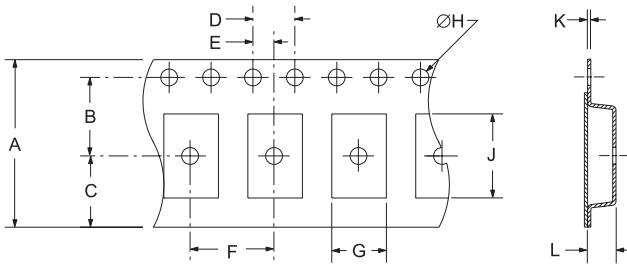
Pin 1: Complementary Output or No Connect  
 Pin 2: Enable/Disable or No Connect  
 Pin 3: Case Ground  
 Pin 4: Output  
 Pin 5: No Connect  
 Pin 6: Supply Voltage

### SUGGESTED SOLDER PAD LAYOUT ALL DIMENSIONS IN MILLIMETERS

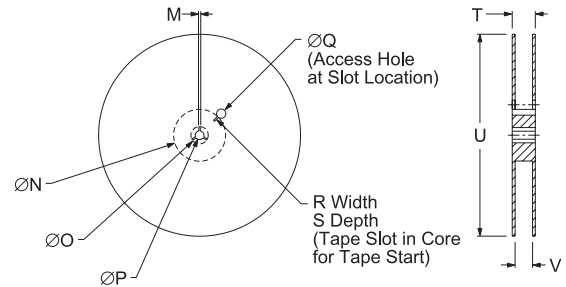


Tolerances = ±0.1

### TAPE AND REEL DIMENSIONS ALL DIMENSIONS IN MILLIMETERS



TAPE	A	B	C	D	E
	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	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	30.4 MAX	360 MAX	24.4+2-0	1000

\*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  
 Ecliptek Manufacturing Identifier

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	E11W2	6-PCB	5.0V	0578	03/02