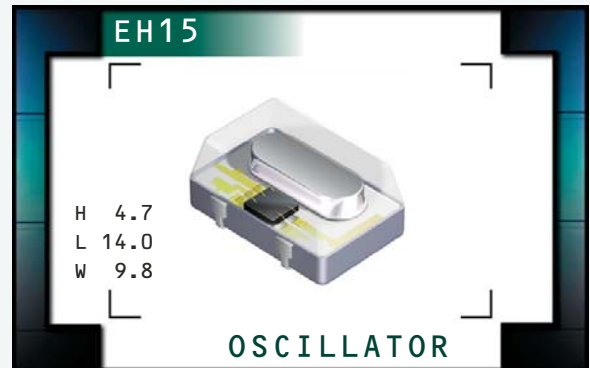


EH15 Series

- Plastic surface mount package
- 3.3V supply voltage
- HCMOS output
- Stability to 20ppm
- 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} ±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	±100ppm, ±50ppm, ±25ppm, or ±20ppm Maximum
Output Voltage Logic High (V_{OH})	2.7V _{DC} Minimum	I _{OH} = -8mA
Output Voltage Logic Low (V_{OL})	0.5V _{DC} Maximum	I _{OL} = +8mA
Rise Time / Fall Time	≤70.000MHz 20% to 80% of Waveform w/HCMOS Load >70.000MHz 20% to 80% of Waveform w/HCMOS Load	6 nSeconds Maximum 4 nSeconds Maximum
Load Drive Capability	≤70.000MHz >70.000MHz	30pF HCMOS Load Maximum 15pF HCMOS Load Maximum
Duty Cycle (at V_{DD}=3.3V_{DC})	at 50% of Waveform	50 ±10(%) (Standard) or 50 ±5(%) (Optional)
Tri-State Input Voltage	V _{IH} : No Connection or ≥2.2V _{DC} V _{IL} : ≤0.8V _{DC}	Enables Output Disables Output: High Impedance
Aging (at 25°C)	±5ppm / year Maximum	
Start Up Time	10mSeconds Maximum	
Period Jitter: Absolute	±250pSec Maximum, ±100pSec Typical	
Period Jitter: One Sigma	±50pSec Maximum, ±40pSec Typical	

MANUFACTURER ECLIPTEK CORP.	CATEGORY OSCILLATOR	SERIES EH15	PACKAGE PLASTIC	VOLTAGE 3.3V	CLASS OS49	REV. DATE 02/04
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PART NUMBERING GUIDE

EH15 00 SJ ET TS - 24.000M TR

FREQUENCY TOLERANCE / STABILITY

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

OPERATING TEMP. RANGE

Blank =0°C to 70°C
 ET=-40°C to 85°C

DUTY CYCLE

Blank=50 ±10(%) (Standard)
 T=50 ±5(%)

PACKAGING OPTIONS

Blank=Bulk
 TR=Tape and Reel (Standard)

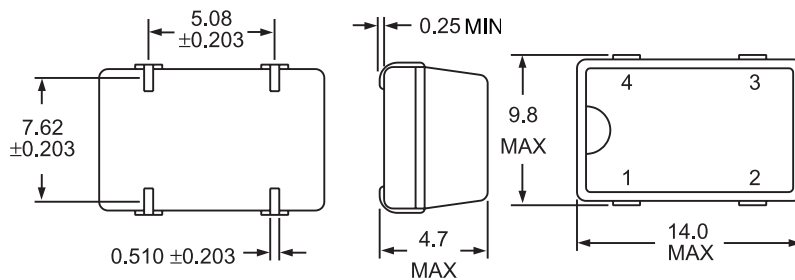
FREQUENCY

OUTPUT CONTROL FUNCTION

TS=Tri-State

MECHANICAL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS

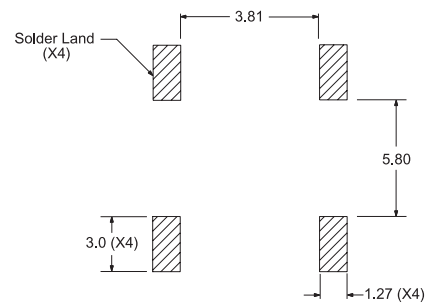


Pin 1: Tri-State
 Pin 2: Case Ground

Pin 3: Output
 Pin 4: Supply Voltage

SUGGESTED SOLDER PAD LAYOUT

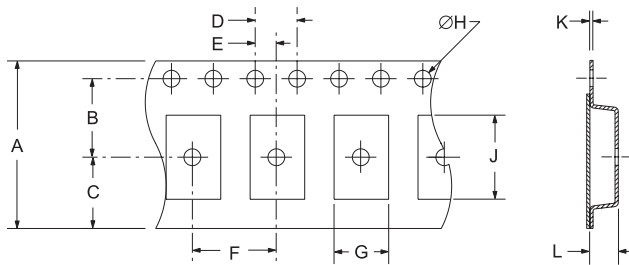
ALL DIMENSIONS IN MILLIMETERS



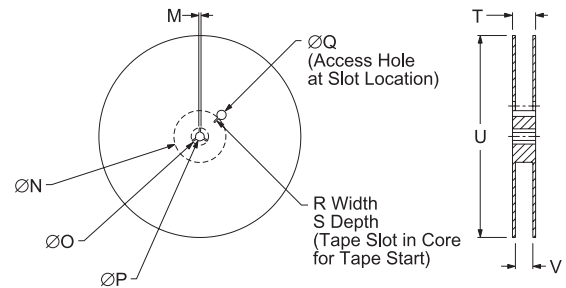
Tolerances = ±0.1

TAPE AND REEL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS



TAPE	A	B	C	D	E	
	24 ±.3	11.5 ±.1	10.75 ±.1	4 ±.2	2 ±.1	
	F	G	H	J	K	L
	12 ±.2	B0*	1.5 +.1-0	A0*	.3 ±.1	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
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
Lead Integrity	MIL-STD-883, Method 2004
Solderability	MIL-STD-883, Method 2002
Temperature Cycling	MIL-STD-883, Method 1010
Resistance to Soldering Heat	MIL-STD-883, Method 210
Resistance to Solvents	MIL-STD-883, Method 215

MARKING SPECIFICATIONS

Line 1: ECLIPTEK
 Line 2: XX.XXX M — Frequency in MHz (5 Digits Maximum + Decimal)
 Line 3: P XX Y ZZ
 — Week of Year
 — Last Digit of Year
 — Ecliptek Manufacturing Identifier
 — Configuration Designator

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EH15	PLASTIC	3.3V	OS49	02/04