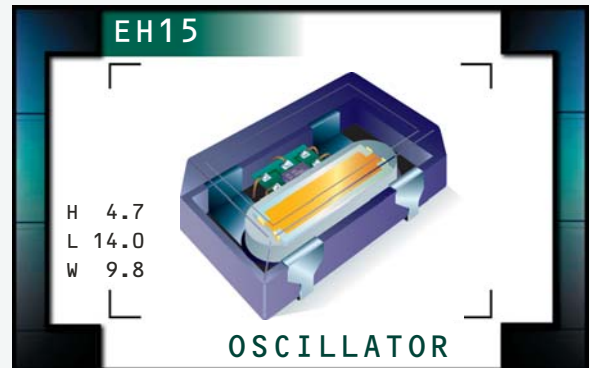


EH15 Series

- 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 Operating Temperature Range, Supply Voltage, and Load	±100ppm, ±50ppm, ±25ppm, or ±20ppm Maximum (0°C to 70°C)
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	6 nSeconds Maximum
	>70.000MHz 20% to 80% of Waveform w/HCMOS Load	4 nSeconds Maximum
Load Drive Capability	≤70.000MHz	30pF HCMOS Load Maximum
	>70.000MHz	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}	Enables Output
	V _{IL} : ≤0.8V _{DC}	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 0549	REV. DATE 03/02
--------------------------------	------------------------	----------------	--------------------	-----------------	---------------	--------------------

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)

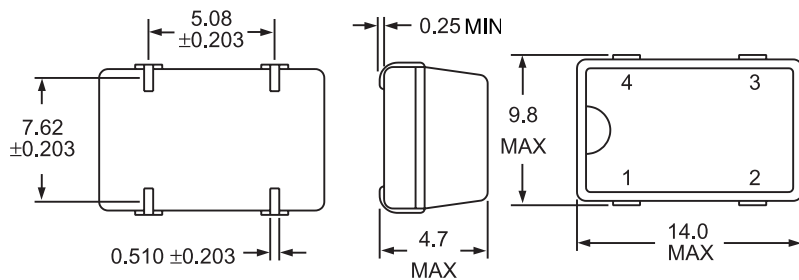
FREQUENCY

OUTPUT CONTROL FUNCTION

TS = Tri-State

MECHANICAL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS

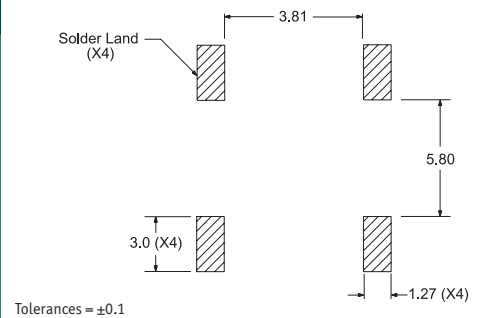


Pin 1: Tri-State
 Pin 2: Case Ground

Pin 3: Output
 Pin 4: Supply Voltage

SUGGESTED SOLDER PAD LAYOUT

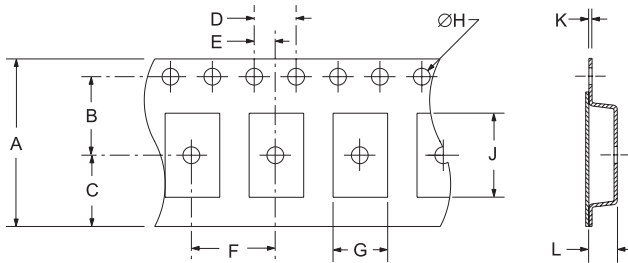
ALL DIMENSIONS IN MILLIMETERS



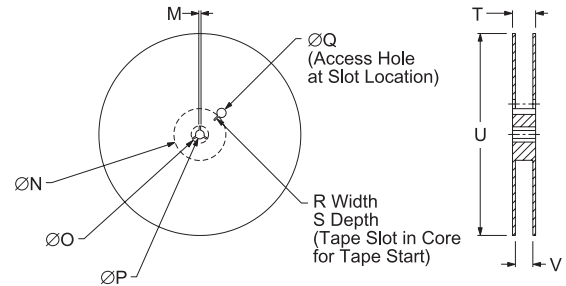
Tolerances = ±0.1

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
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	EH15	PLASTIC	3.3V	OS49	03/02