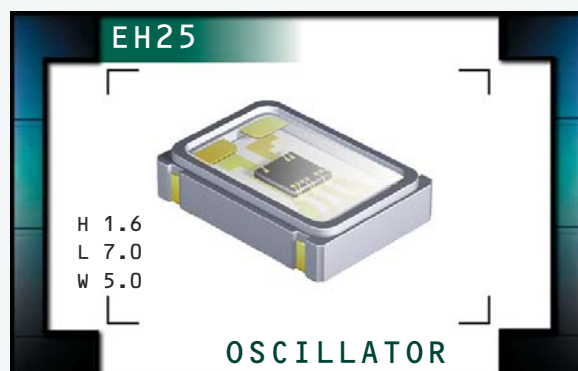


EH25 Series

- Pb-free ceramic SMD package
- 5.0V supply voltage
- HCMOS/TTL output
- Stability to 20ppm
- Available on tape and reel



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ECLIPTEK
CORPORATION



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})		5.0V _{DC} ±10%	
Input Current		50mA 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	
Output Voltage Logic High (V_{OH})	w/TTL Load	2.4V _{DC} Minimum	I _{OH} = -16mA
	w/HCMOS Load	V _{DD} -0.4V _{DC} Minimum	I _{OH} = -16mA
Output Voltage Logic Low (V_{OL})	w/TTL Load	0.4V _{DC} Maximum	I _{OL} = +16mA
	w/HCMOS Load	0.5V _{DC} Maximum	I _{OL} = +16mA
Duty Cycle ($V_{DD}=5.0V_{DC}$)	at 1.4V _{DC} w/TTL Load; at 50% of waveform w/HCMOS Load (≤70.000MHz)	50 ±10(%) (Standard)	
	at 50% of waveform w/ TTL Load or w/HCMOS Load (>70.000MHz)	50 ±10(%) (Standard)	
	at 50% of waveform w/TTL Load or w/HCMOS Load	50 ±5(%) (Optional)	
Rise Time / Fall Time	0.8V _{DC} to 2.0V _{DC} w/TTL Load or 20% to 80% of Waveform w/HCMOS Load (≤70.000MHz)	6 nSeconds Maximum	
	0.8V _{DC} to 2.0V _{DC} w/TTL Load or 20% to 80% of Waveform w/HCMOS Load (>70.000MHz)	4 nSeconds Maximum	
Tri-State Input Voltage	V _{IH} : No Connection	Enables Output	
	V _{IH} : ≥2.2V _{DC}	Enables Output	
	V _{IL} : ≤0.8V _{DC}	Disables Output: High Impedance	
Aging (at 25°C)		±5ppm / year Maximum	
Start Up Time		10 mSeconds Maximum	
Load Drive Capability	≤70.000MHz	10TTL Load or 50pF HCMOS Load Maximum	
	>70.000MHz	5TTL Load or 15pF HCMOS Load Maximum	
Period Jitter: Absolute		±250pSec Maximum, ±100pSec Typical	
Period Jitter: One Sigma		±50pSec Maximum, ±30pSec Typical	

MANUFACTURER
ECLIPTEK CORP.

CATEGORY
OSCILLATOR

SERIES
EH25

PACKAGE
CERAMIC

VOLTAGE
5.0V

CLASS
OS48

REV. DATE
02/04

PART NUMBERING GUIDE

EH25 00 ET TS - 24.000M TR

FREQUENCY TOLERANCE / STABILITY

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

OPERATING TEMP. RANGE

Blank = 0°C to 70°C, ET = -40°C to 85°C

DUTY CYCLE

Blank = 50 $\pm$ 10(%) (Standard), T = 50 $\pm$ 5(%)

AVAILABLE OPTIONS

Blank = Bulk (Standard)
TR = Tape and Reel

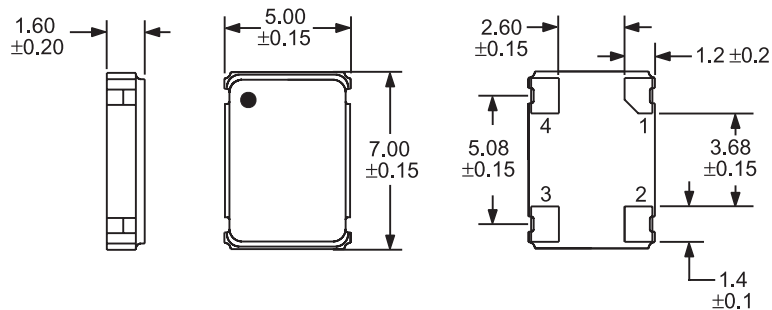
FREQUENCY

OUTPUT CONTROL FUNCTION

TS = Tri-State

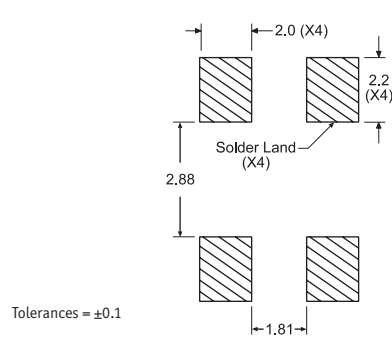
MECHANICAL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS



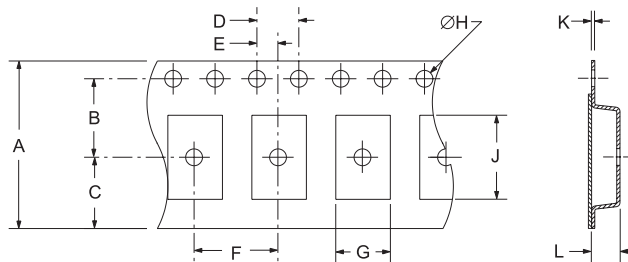
SUGGESTED SOLDER PAD LAYOUT

ALL DIMENSIONS IN MILLIMETERS

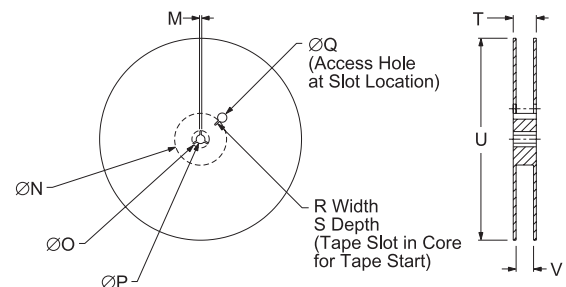


TAPE AND REEL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS



REEL	A	B	C	D	E
	16 $\pm$ 3-1	7.5 $\pm$ 1	6.75 $\pm$ 1	4 $\pm$ 1	2 $\pm$ 1
F	G	H	J	K	L
8 $\pm$ 1	B0*	1.5 $\pm$ 1-0	A0*	.3 $\pm$.05	K0*



REEL	M	N	O	P	Q
	1.5 MIN	50 MIN	20.2 MIN	13 $\pm$.2	40 MIN
R	S	T	U	V	QTY/REEL
2.5 MIN	10 MIN	22.4 MAX	360 MAX	16.4 $\pm$ 2-0	1,000

*Compliant to EIA 481A

ENVIRONMENTAL/MECHANICAL SPECIFICATIONS

Characteristic

Fine Leak Test
Gross Leak Test
Mechanical Shock
Vibration
Lead Integrity
Solderability
Temperature Cycling
Resistance to Soldering Heat
Resistance to Solvents

Specification

MIL-STD-883, Method 1014, Condition A
MIL-STD-883, Method 1014, Condition C
MIL-STD-202, Method 213, Condition C
MIL-STD-883, Method 2007, Condition A
MIL-STD-883, Method 2004
MIL-STD-883, Method 2002
MIL-STD-883, Method 1010
MIL-STD-883, Method 210
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	EH25	CERAMIC	5.0V	OS48	02/04