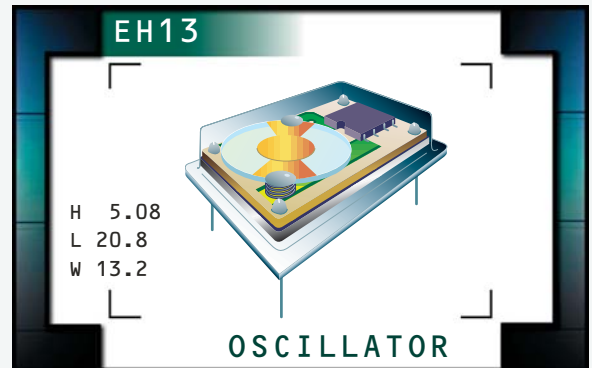


EH13 Series

- HCMOS output
- 3.3V supply voltage
- 14 pin DIP package
- Stability to 20ppm
- Custom lead length, gull wing options available



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	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EH13	14 pin DIP	3.3V	OS44	03/02

PART NUMBERING GUIDE

EH13 00 ET TS - 70.000M - G

FREQUENCY TOLERANCE / STABILITY

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

OPERATING TEMP. RANGE

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

DUTY CYCLE

Blank=50±10(%) (Standard), T=50±5(%)

AVAILABLE OPTIONS

Blank=None (Standard)
CLXXX=Custom Lead Length (See Page 133)
G=Full Size Gull Wing (See Page 132)

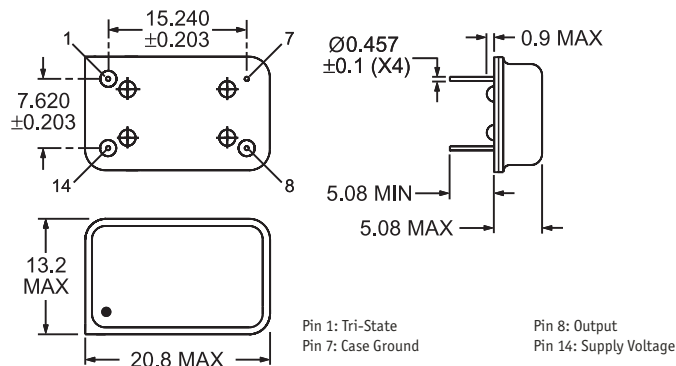
FREQUENCY

OUTPUT CONTROL FUNCTION

TS=Tri-State Enable High

NOTES

MECHANICAL DIMENSIONS ALL DIMENSIONS IN MILLIMETERS



ENVIRONMENTAL/MECHANICAL SPECIFICATIONS

Characteristic	Specification
Seal Integrity	Bubble test in Perfluorocarbon at +125°C ±5°C for 60 seconds minimum.
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: EH13 TS	Series Designator
Line 3: XX.XXX M	Frequency in MHz (5 Digits Maximum + Decimal)
Line 4: XX Y ZZ	Week of Year Last Digit of Year Ecliptek Manufacturing Identifier

Note: Pin 1 shall be designated with a dot

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EH13	14 pin DIP	3.3V	OS44	03/02