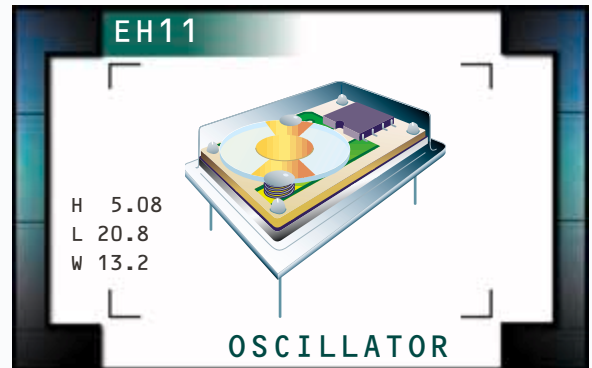


EH11 Series

- HCMOS/TTL output
- 5.0V 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})	5.0V _{DC} ±10%	
Input Current	50mA 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 Only)
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
Pin 1 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 Maximum or 50pF HCMOS Load Max
	>70.000MHz	5TTL Load Maximum or 15pF HCMOS Load Max
Period Jitter: Absolute	±250pSec Maximum, ±100pSec Typical	
Period Jitter: One Sigma	±50pSec Maximum, ±30pSec Typical	

PART NUMBERING GUIDE

EH11 00 ET TS - 70.000M - G

FREQUENCY TOLERANCE / STABILITY

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

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 123)
G=Full Size Gull Wing (See Page 122)

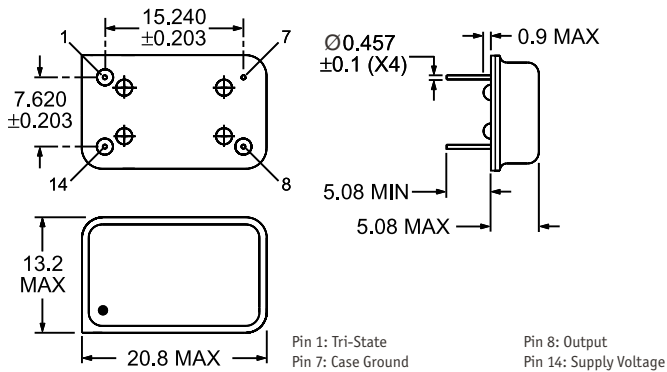
FREQUENCY

PIN 1 CONNECTION

TS=Tri-State Enable High

NOTES

MECHANICAL DIMENSIONS ALL DIMENSIONS IN MILLIMETERS



MARKING SPECIFICATIONS

Line 1: ECLIPTEK

Line 2: EH11 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
Eclipse Manufacturing Identifier

Note: Pin 1 shall be designated with a dot

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.

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EH11	14 Pin DIP	5.0V	OS44	06/00