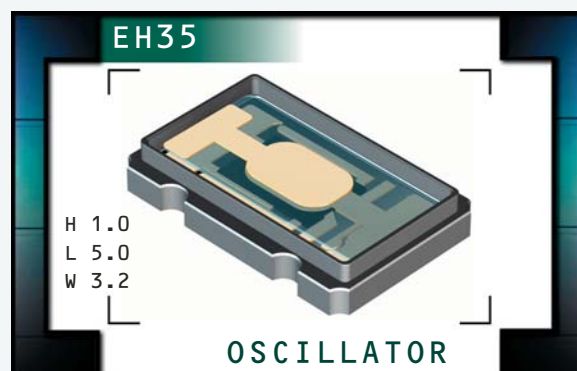


EH35 Series



- Ceramic SMD package
- 5.0V supply voltage
- HCMOS/TTL 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})		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
Tri-State Input Voltage	V_{IH} : No Connection	Enables Output
	$V_{IH} \geq 2.2V_{DC}$	Enables Output
	$V_{IL} \leq 0.8V_{DC}$	Disables Output: High Impedance
Aging (at 25°C)		±5ppm / year Maximum
Start Up Time		10 mSeconds Maximum
Period Jitter (Absolute)		±250pSec Maximum, ±100pSec Typical
Period Jitter (One Sigma)		±50pSec Maximum, ±30pSec Typical
Load Drive Capability	≤70.000MHz	10TTL Load Maximum or 50pF HCMOS Load Max
	>70.000MHz	5TTL Load Maximum or 15pF HCMOS Load Max

MANUFACTURER
ECLIPTEK CORP.

CATEGORY
OSCILLATOR

SERIES
EH35

PACKAGE
CERAMIC

VOLTAGE
5.0V

CLASS
OS89

REV. DATE
03/02

PART NUMBERING GUIDE

EH35 00 ET TS - 24.000M TR

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, ET = -40°C to 85°C

DUTY CYCLE

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

AVAILABLE OPTIONS

Blank = Bulk (Standard)
TR = Tape and Reel

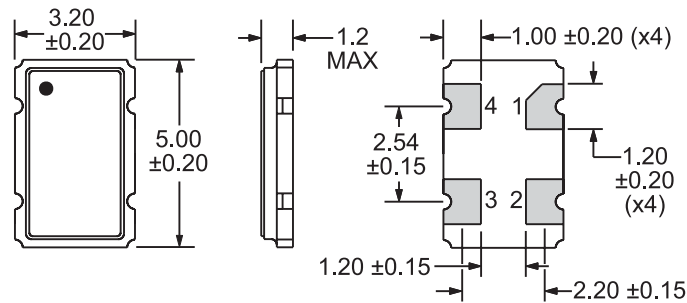
FREQUENCY

OUTPUT CONTROL FUNCTION

TS = Tri-State

MECHANICAL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS

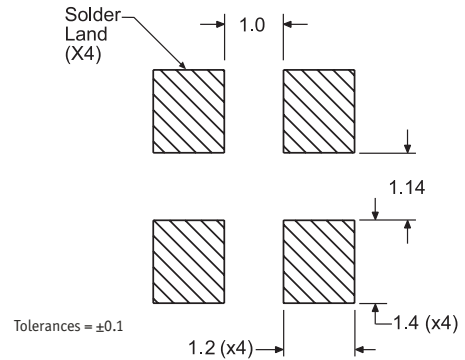


Pin 1: Tri-State
Pin 2: Case Ground

Pin 3: Output
Pin 4: Supply Voltage

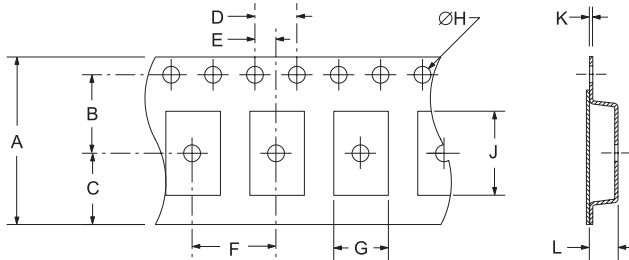
SUGGESTED SOLDER PAD LAYOUT

ALL DIMENSIONS IN MILLIMETERS

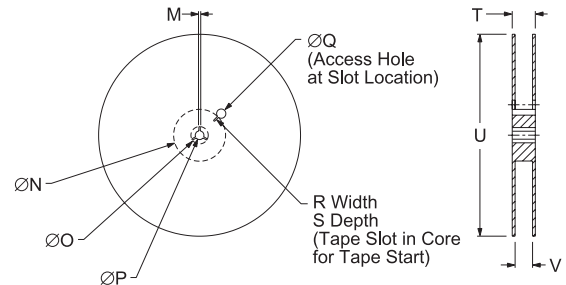


TAPE AND REEL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS



TAPE	A	B	C	D	E
	12.0±0.2	5.5±0.1	6.5±0.1	4.0±0.1	2.0±0.1
F	G	H	J	K	L
8.0±0.1	B0*	1.5 +0.1-0.0	A0*	0.30 ±0.05	K0*



REEL	M	N	O	P	Q
	1.5 MIN	50 MIN	20.2 MIN	13.0±0.2	40 MIN
R	S	T	U	V	QTY/REEL
2.5 MIN	10 MIN	18.4 MAX	180 MAX	12.4+2-0	1,000

*Compliant to EIA 481A

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 50cm.
Thermal Shock	300 Cycles from -55°C to +125°C, 5 minute dwell

MARKING SPECIFICATIONS

Line 1: E XX.XXX

Frequency in MHz (5 Digits Maximum + Decimal)

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EH35	CERAMIC	5.0V	OS89	03/02