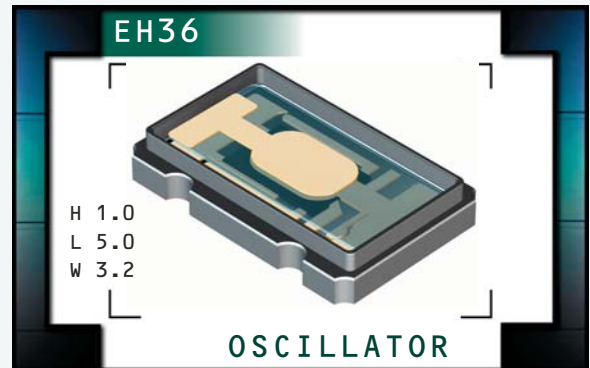


EH36 Series

- Ceramic SMD 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 >70.000MHz 20% to 80% of Waveform w/HCMOS Load	6 nSeconds Maximum 4 nSeconds Maximum
Load Drive Capability	≤70.000MHz >70.000MHz	30pF HCMOS Load Maximum 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} V _{IL} : ≤0.8V _{DC}	Enables Output 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 EH36	PACKAGE CERAMIC	VOLTAGE 3.3V	CLASS 0S89	REV. DATE 03/02
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PART NUMBERING GUIDE

EH36 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 or
ET=-40°C to 85°C

DUTY CYCLE

Blank=50±10%(Standard)
T=50±5(%)

AVAILABLE OPTIONS

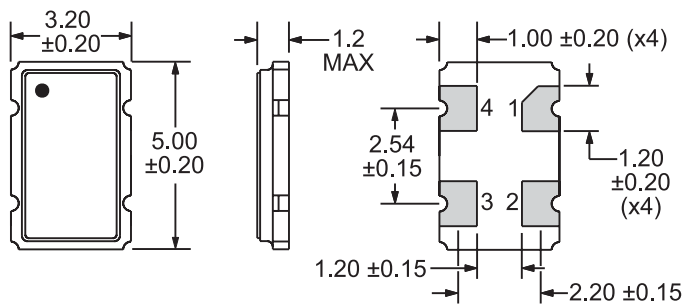
Blank=Bulk (Standard)
TR=Tape and Reel

FREQUENCY

OUTPUT CONTROL FUNCTION

TS=Tri-State

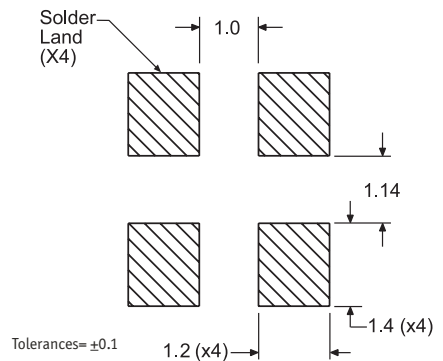
MECHANICAL DIMENSIONS ALL DIMENSIONS IN MILLIMETERS



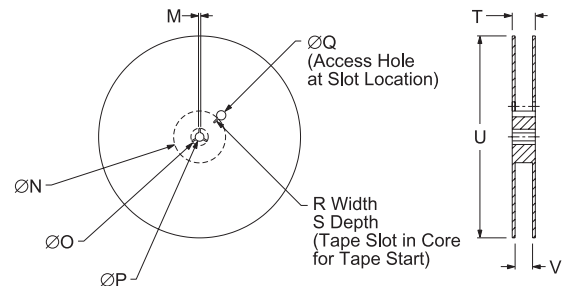
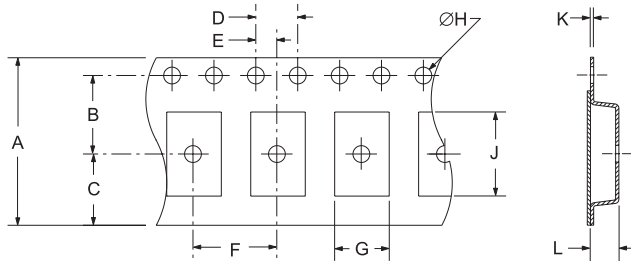
Pin 1: Tri-State
Pin 2: Case Ground

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	EH36	CERAMIC	3.3V	OS89	03/02