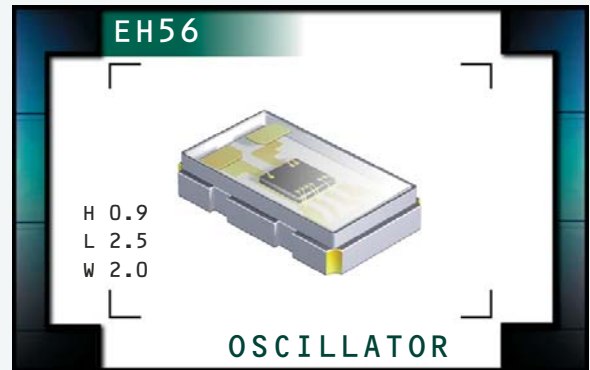


EH56 Series



- Crystal Clock Oscillators
- LVCMOS Output
- +3.3V Supply Voltage
- Tri-State Output Function
- 4 Pad Ceramic SMD Package
- Low Stand-by Current
- RoHS Compliant (Pb-Free)



ELECTRICAL SPECIFICATIONS

Frequency Range	3.300MHz	3.579545MHz	3.6864MHz	5.000MHz	6.000MHz	6.144MHz	7.000MHz
	7.3728MHz	8.000MHz	9.000MHz	10.000MHz	12.000MHz	13.000MHz	14.7456MHz
	16.000MHz	19.200MHz	20.000MHz	24.000MHz	24.576MHz	25.000MHz	26.000MHz
	27.000MHz	30.000MHz	32.000MHz	32.110MHz	33.000MHz	33.330MHz	33.333MHz
	37.500MHz	38.400MHz	40.000MHz	48.000MHz	50.000MHz	52.000MHz	54.000MHz
	55.000MHz	66.000MHz	70.000MHz	75.000MHz	80.000MHz	83.000MHz	88.000MHz
	96.000MHz	100.00MHz					

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} ±5%

Input Current (No Load)	3.300MHz to 25.000MHz	10mA Maximum
	25.001MHz to 75.000MHz	12mA Maximum
	75.001MHz to 100.000MHz	13mA Maximum

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, 260°C Reflow, Shock, and Vibration	±100ppm Maximum
		±50ppm Maximum
		±25ppm Maximum
		±20ppm Maximum

Output Voltage Logic High (V_{OH}) 90% of V_{DD} Minimum I_{OH} = -8mA

Output Voltage Logic Low (V_{OL}) 10% of V_{DD} Maximum I_{OL} = +8mA

Rise Time / Fall Time	3.300MHz to 50.000MHz 20% to 80% of Waveform	6 nSeconds Maximum
	50.001MHz to 75.000MHz 20% to 80% of Waveform	4 nSeconds Maximum
	75.001MHz to 100.000MHz 20% to 80% of Waveform	2 nSeconds Maximum

Load Drive Capability	≤50.000MHz	30pF Maximum
	>50.000MHz	15pF Maximum

Duty Cycle at 50% of Waveform 50 ±10% (Standard) or 50 ±5% (Optional)

Tri-State Input Voltage	V _{IH} : ≥90% of V _{DD} or No Connection	Enables Output
	V _{IL} : ≤10% of V _{DD}	Disables Output: High Impedance

Standby Current Pin 1 = Ground 10µA Maximum

Aging (at 25°C) ±5ppm / year Maximum

Start Up Time 10mSeconds Maximum

Period Jitter: Absolute ±100pSec Maximum

MANUFACTURER ECLIPTEK CORP.	CATEGORY OSCILLATOR	SERIES EH56	PACKAGE CERAMIC	VOLTAGE 3.3V	CLASS 056Z	REV. DATE 07/11
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PART NUMBERING GUIDE

EH56 00 ET TS - 24.000M TR

FREQUENCY TOLERANCE / STABILITY

00=±100ppm Maximum, 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(%)
T=50±5(%)

AVAILABLE OPTIONS

Blank=Bulk
TR=Tape & Reel

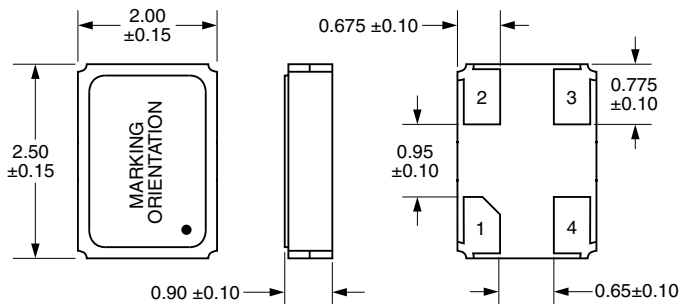
FREQUENCY

OUTPUT CONTROL FUNCTION

TS=Tri-State

MECHANICAL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS

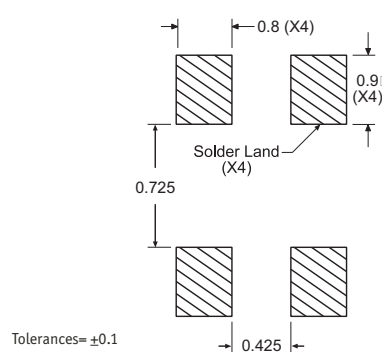


Pin 1: Tri-State
Pin 2: Case Ground

Pin 3: Output
Pin 4: Supply Voltage

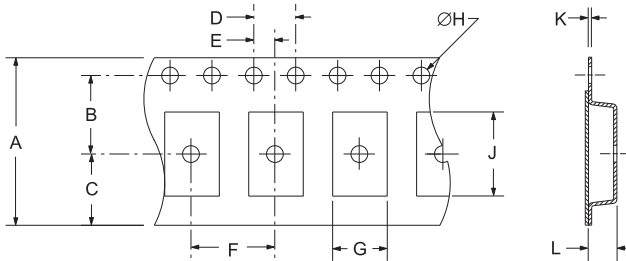
SUGGESTED SOLDER PAD LAYOUT

ALL DIMENSIONS IN MILLIMETERS

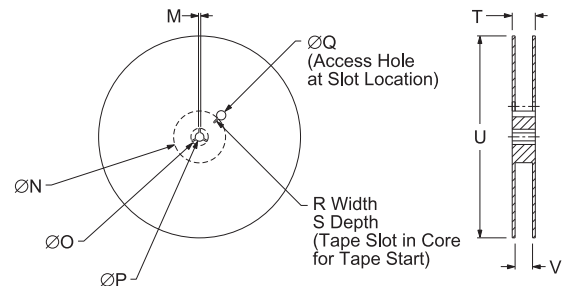


TAPE AND REEL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS



REEL	A	B	C	D	E
	8.0±.2	3.5±.1	2.75±.1	4±.1	2±.1
F	G	H	J	K	L
4±.1	B0*	1.55±.05	A0*	.25±.05	K0*



REEL	M	N	O	P	Q
	1.5 MIN	50 MIN	20.2 MIN	13±.2	40 MIN
R	S	T	U	V	QTY/REEL
2.5 MIN	10 MIN	14.4 MAX	360 MAX	8.4±1.5-0	1,000

*Compliant to EIA 481A

ENVIRONMENTAL/MECHANICAL SPECIFICATIONS

Characteristic	Specification
ESD Susceptibility	MIL-STD-883, Method 3015, Class 1, HBM: 1500V
Fine Leak Test	MIL-STD-883, Method 1014, Condition A
Flammability	UL94-V0
Gross Leak Test	MIL-STD-883, Method 1014, Condition C
Mechanical Shock	MIL-STD-883, Method 2002, Condition B
Moisture Resistance	MIL-STD-883, Method 1004
Moisture Sensitivity	J-STD-020, MSL 1
Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition K
Resistance to Solvents	MIL-STD-202, Method 215
Solderability	MIL-STD-883, Method 2003
Temperature Cycling	MIL-STD-883, Method 1010, Condition B
Vibration	MIL-STD-883, Method 2007, Condition A

MARKING SPECIFICATIONS

Line 1: EPO

Line 2: XXXXX

Ecliptek Manufacturing Identifier

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EH56	CERAMIC	3.3V	OS6Z	07/11