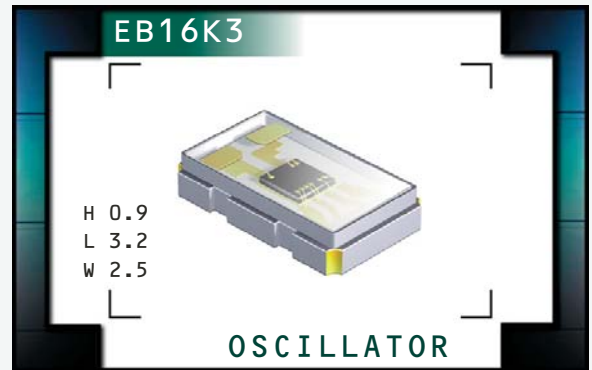


EB16K3 Series



ECLIPTEK[®]
CORPORATION

- Crystal Clock Oscillators
- LVCMOS Output
- +1.8V Supply Voltage
- Tri-State Output Function
- 4 Pad Ceramic SMD Package
- Low Input Current
- RoHS Compliant (Pb-Free)



NOTES

ELECTRICAL SPECIFICATIONS

Frequency Range		32.768kHz
Operating Temperature Range		-20°C to +70°C or -40°C to +85°C
Storage Temperature Range		-55°C to +125°C
Supply Voltage (V_{DD})		1.8V _{DC} ±5%
Input Current	No Load	1.2µA 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, Shock, and Vibration	±175ppm Maximum ±100ppm Max. (-20°C to +70°C only)
Output Voltage Logic High (V_{OH})		90% of V _{DD} Minimum I _{OH} = -2mA
Output Voltage Logic Low (V_{OL})		10% of V _{DD} Maximum I _{OL} = +2mA
Rise Time / Fall Time	20% to 80% of Waveform	200nSeconds Maximum
Load Drive Capability		15pF Maximum
Duty Cycle	at 50% of Waveform	50 ±10(%)
Tri-State Input Voltage	V _{IH} : ≥90% of V _{DD} or No Connect V _{IH} : ≤10% of V _{DD}	Enables Output Disables Output: High Impedance
Standby Current	Disabled Output: High Impedance	1.0µA Maximum
Start Up Time		1.0 Seconds Maximum

MANUFACTURER
ECLIPTEK CORP.

CATEGORY
OSCILLATOR

SERIES
EB16K3

PACKAGE
CERAMIC

VOLTAGE
1.8V

CLASS
OS8B

REV. DATE
04/10

PART NUMBERING GUIDE

EB16K3 A C 1 H - 32.768K TR

FREQUENCY TOLERANCE / STABILITY

A = ±100ppm Maximum
 B = ±175ppm Maximum

OPERATING TEMPERATURE RANGE

C = -20°C to +70°C
 D = -40°C to +85°C

DUTY CYCLE

1 = 50 ±10(%)

AVAILABLE OPTIONS

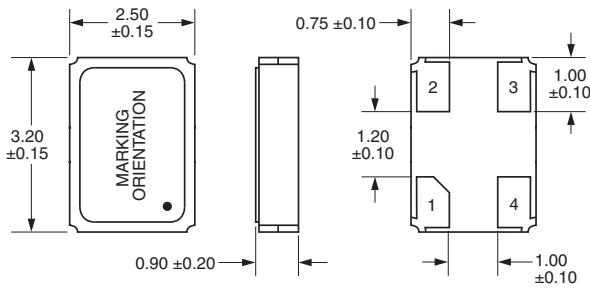
Blank = Bulk
 TR = Tape & Reel

FREQUENCY

PIN 1 CONNECTION

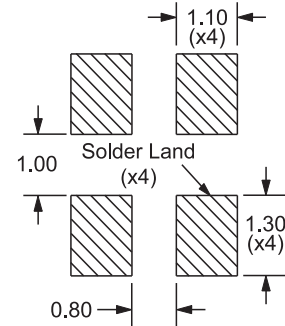
H = Tri-State (High Impedance)

MECHANICAL DIMENSIONS
 ALL DIMENSIONS IN MILLIMETERS



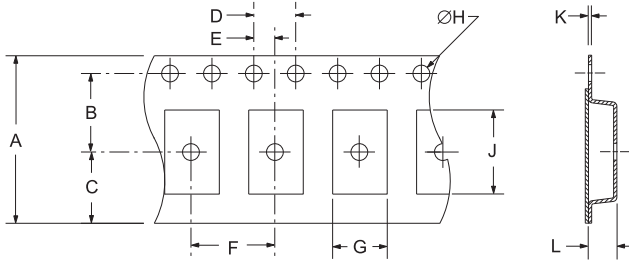
Pin 1: Tri-State
 Pin 2: Case Ground
 Pin 3: Output
 Pin 4: Supply Voltage

SUGGESTED SOLDER PAD LAYOUT
 ALL DIMENSIONS IN MILLIMETERS

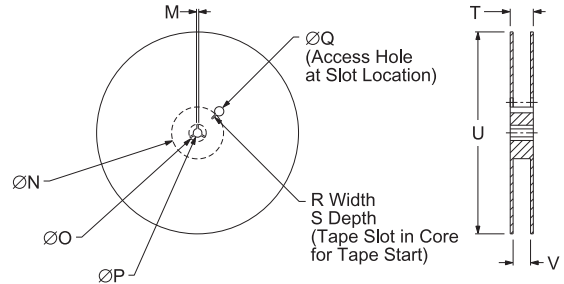


Tolerances = ±0.1

TAPE AND REEL DIMENSIONS
 ALL DIMENSIONS IN MILLIMETERS



REEL	A	B	C	D	E
	8.0±0.2	3.5±0.1	2.75±0.1	4.0±0.1	2.0±0.1
F	G	H	J	K	L
4.0±0.1	2.8±.1	1.50+0.10	3.5±.1	0.25 ±0.05	1.35±.1



REEL	M	N	O	P	Q
	1.5 MIN	50 MIN	20.2 MIN	13.0±0.5	40 MIN
R	S	T	U	V	QTY/REEL
2.5 MIN	10 MIN	14.4 MAX	180 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: E32.7 — Frequency in kHz (3 digits Maximum + Decimal)
 Line 2: XXXXX — Ecliptek Manufacturing Identifier

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EB16K3	CERAMIC	1.8V	OS8B	04/10