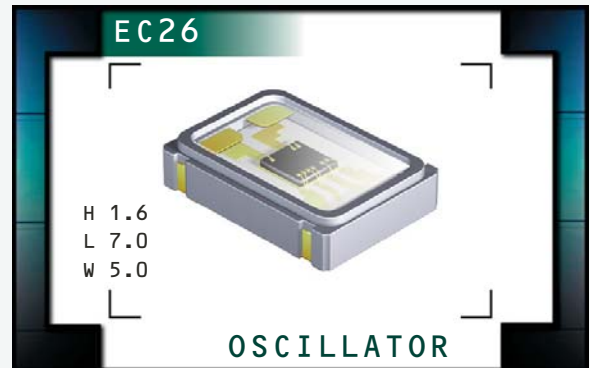


EC26 Series



ECLIPTEK[®]
CORPORATION

- 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	1.544MHz to 125MHz, 125.00093MHz, 125.00312MHz, 125.009MHz, 125.00937MHz, 125.01MHz, 126MHz, 127MHz, 128MHz, 130MHz, 131.072MHz, 131.25MHz, 132MHz, 133MHz, 133.33MHz, 133.333MHz, 133.3333MHz, 135MHz, 136MHz, 137.472MHz, 140MHz, 142MHz, 142.85MHz, 143MHz, 145MHz, 148.351MHz, 148.3516MHz, 148.5MHz, 150MHz, 155MHz, 155.52MHz, 156.25MHz, 159.375MHz, 159.38MHz, 161.1328MHz, 162.5MHz, 166MHz, 175MHz, 187.5MHz, and 200MHz	
Operating Temperature Range		-10°C to +70°C -40°C to +85°C
Storage Temperature Range		-55°C to +125°C
Supply Voltage (V_{DD})		3.3V _{DC} ±10%
Input Current	1.544MHz to 32.000MHz 32.000001MHz to 50.000MHz 50.000001MHz to 70.000MHz 70.000001MHz to 125.000MHz 125.009MHz to 200.000MHz	10mA Maximum 18mA Maximum 20mA Maximum 40mA Maximum 60mA 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	±100ppm Maximum ±50ppm Maximum ±25ppm Maximum ±20ppm Maximum
Output Voltage Logic High (V_{OH})	I _{OH} = -8mA	90% of V _{DD} Minimum
Output Voltage Logic Low (V_{OL})	I _{OL} = +8mA	10% of V _{DD} Maximum
Rise / Fall Time	Measured at 20% to 80% of Waveform ≤ 35.000MHz (30pF Load) ≤ 35.000MHz (15pF Load) 35.001MHz to 165.000MHz > 165.000MHz	7nSeconds Maximum 5nSeconds Maximum 3nSeconds Maximum 2nSeconds Maximum
Duty Cycle	at 50% of Waveform	50 ±10(%) (Standard) 50 ±5(%) (Optional)
Load Drive Capability	≤ 35.000MHz > 35.000MHz	30pF Maximum 15pF Maximum
Tri-State Input Voltage	No Connection V _{IH} : ≥70% of V _{DD} V _{IL} : ≤30% of V _{DD}	Enables Output Enables Output Disables Output: High Impedance
Standby Current	Disabled Output: High Impedance	10µA Maximum
Start Up Time		10 mSeconds Maximum
RMS Phase Jitter	12kHz to 20MHz offset frequency	1pSeconds Maximum

MANUFACTURER ECLIPTEK CORP.	CATEGORY OSCILLATOR	SERIES EC26	PACKAGE CERAMIC	VOLTAGE 3.3V	CLASS OS30	REV. DATE 02/10
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PART NUMBERING GUIDE

EC26 00 ET TTS - 40.000M TR

FREQUENCY TOLERANCE / STABILITY

00=±100ppm Maximum
 45=±50ppm Maximum
 25=±25ppm Maximum
 20=±20ppm Maximum

OPERATING TEMPERATURE RANGE

Blank = -10°C to +70°C
 ET = -40°C to +85°C

PACKAGING OPTIONS

Blank = Bulk
 TR = Tape & Reel

FREQUENCY

OUTPUT CONTROL FUNCTION

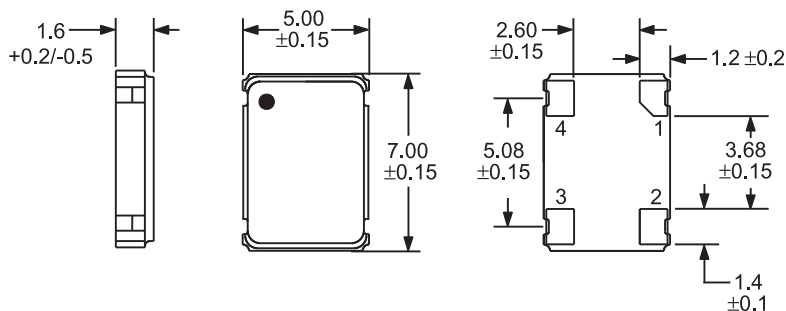
TS = Tri-State

DUTY CYCLE

Blank = 50±10(%)
 T = 50±5(%)

MECHANICAL DIMENSIONS

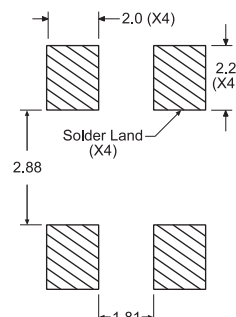
ALL DIMENSIONS IN MILLIMETERS



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

SUGGESTED SOLDER PAD LAYOUT

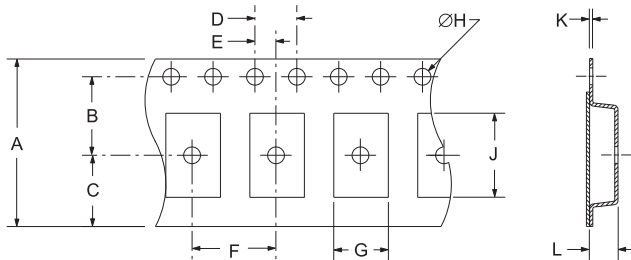
ALL DIMENSIONS IN MILLIMETERS



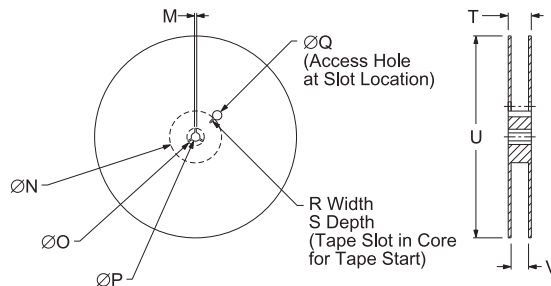
Tolerances = ±0.1

TAPE AND REEL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS



TAPE	A	B	C	D	E
	16+3-.1	7.5±.1	6.75±.1	4±.1	2±.1
F	G	H	J	K	L
8±.1	B0*	1.5+1-0	A0*	.3±.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	22.4 MAX	360 MAX	16.4+2-0	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: ECLIPTEK

Line 2: XX.XXX M
 Frequency in MHz (5 Digits Maximum + Decimal)

Line 3: XX Y ZZ
 Week of Year
 Last Digit of Year
 Ecliptek Manufacturing Identifier

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EC26	CERAMIC	3.3V	OS30	02/10