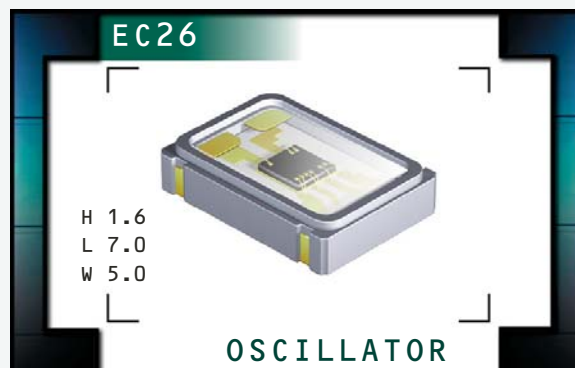


EC26 Series

- 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)



ECLIPTEK
CORPORATION



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
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Operating Temperature Range	-10°C to +70°C -40°C to +85°C
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Storage Temperature Range	-55°C to +125°C
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Supply Voltage (V_{DD})	3.3V _{DC} ±10%
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Input Current	1.544MHz to 32.000MHz	10mA Maximum
	32.000001MHz to 50.000MHz	18mA Maximum
	50.000001MHz to 70.000MHz	20mA Maximum
	70.000001MHz to 125.000MHz	40mA Maximum
	125.009MHz to 200.000MHz	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
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Output Voltage Logic High (V_{OH})	$I_{OH} = -8mA$	90% of V_{DD} Minimum
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Output Voltage Logic Low (V_{OL})	$I_{OL} = +8mA$	10% of V_{DD} Maximum
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Rise / Fall Time	Measured at 20% to 80% of Waveform	
	≤ 35.000MHz (30pF Load)	7nSeconds Maximum
	≤ 35.000MHz (15pF Load)	5nSeconds Maximum
	35.001MHz to 165.000MHz	3nSeconds Maximum
	> 165.000MHz	2nSeconds Maximum

Duty Cycle	at 50% of Waveform	50 ±10(%) (Standard) 50 ±5(%) (Optional)
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Load Drive Capability	≤ 35.000MHz	30pF Maximum
	> 35.000MHz	15pF Maximum

Tri-State Input Voltage	No Connection	Enables Output
	$V_{IH} \geq 70\%$ of V_{DD}	Enables Output
	$V_{IL} \leq 30\%$ of V_{DD}	Disables Output: High Impedance

Standby Current	Disabled Output: High Impedance	10μA Maximum
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Start Up Time		10 mSeconds Maximum
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RMS Phase Jitter	12kHz to 20MHz offset frequency	1pSeconds Maximum
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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 TS - 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

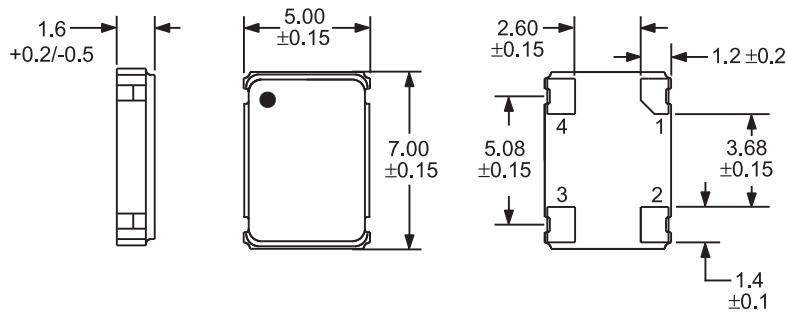
TS = Tri-State

DUTY CYCLE

Blank = 50 ±10(%)
T = 50 ±5(%)

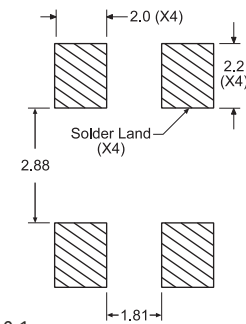
MECHANICAL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS



SUGGESTED SOLDER PAD LAYOUT

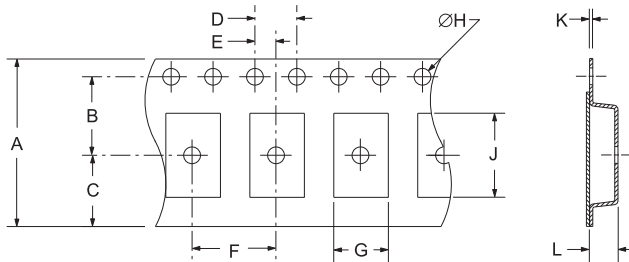
ALL DIMENSIONS IN MILLIMETERS



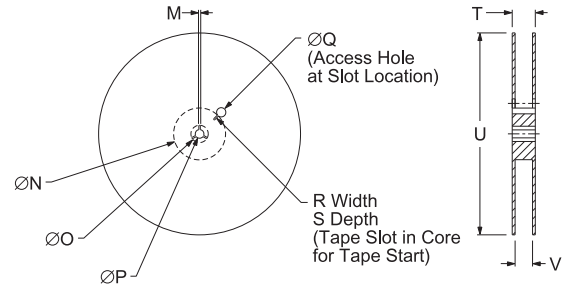
Tolerances = ±0.1

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