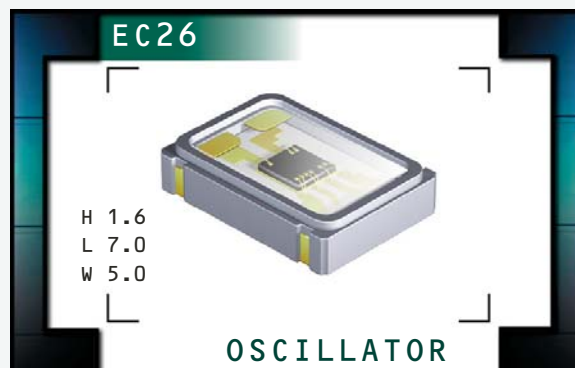


EC26 Series

- RoHS Compliant (Pb-Free)
- Ceramic SMD package
- 3.3V supply voltage
- LVCMOS Output
- Stability to $\pm 20\text{ppm}$
- Standby Function
- Available in tube or tape and reel



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	
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} $\pm 10\%$	
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	$\pm 100\text{ppm}$ Maximum $\pm 50\text{ppm}$ Maximum $\pm 25\text{ppm}$ Maximum $\pm 20\text{ppm}$ Maximum
Output Voltage Logic High (V_{OH})	$I_{OH} = -8\text{mA}$	90% of V_{DD} Minimum
Output Voltage Logic Low (V_{OL})	$I_{OL} = +8\text{mA}$	10% of V_{DD} Maximum
Rise / Fall Time	Measured at 20% to 80% of Waveform $\leq 35.000\text{MHz}$ (30pF Load) $\leq 35.000\text{MHz}$ (15pF Load) 35.001MHz to 165.000MHz $> 165.000\text{MHz}$	7nSeconds Maximum 5nSeconds Maximum 3nSeconds Maximum 2nSeconds Maximum
Duty Cycle	at 50% of Waveform	50 $\pm 10\%$ (Standard) 50 $\pm 5\%$ (Optional)
Load Drive Capability	$\leq 35.000\text{MHz}$ $> 35.000\text{MHz}$	30pF Maximum 15pF Maximum
Tri-State Input Voltage	No Connection $V_{IH} \geq 70\%$ of V_{DD} $V_{IL} \leq 30\%$ of V_{DD}	Enables Output Enables Output Disables Output: High Impedance
Standby Current	Disabled Output: High Impedance	10 μA 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
03/09

PART NUMBERING GUIDE

EC26 00 ET TS - 40.000M TR

FREQUENCY TOLERANCE / STABILITY

00=±100ppm Maximum (Standard)

45=±50ppm Maximum

25=±25ppm Maximum

20=±20ppm Maximum

OPERATING TEMPERATURE RANGE

Blank=-10°C to 70°C (Standard)

ET=-40°C to 85°C

PACKAGING OPTIONS

Blank=Bulk, TR=Tape and Reel (Standard)

FREQUENCY

OUTPUT CONTROL FUNCTION

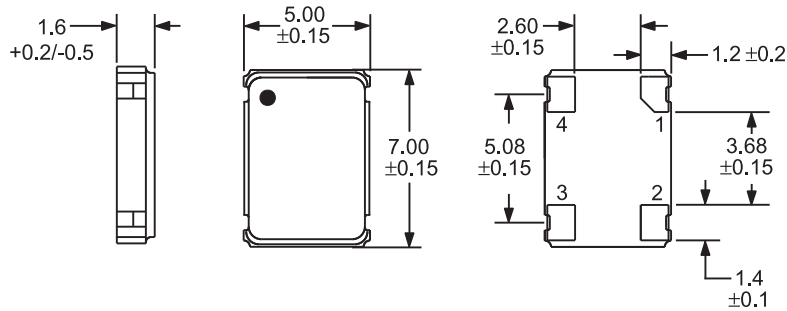
TS=Tri-State

DUTY CYCLE

Blank=50±10% (Standard), T=50±5%

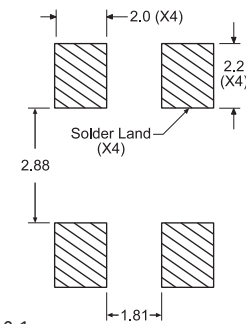
MECHANICAL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS



SUGGESTED SOLDER PAD LAYOUT

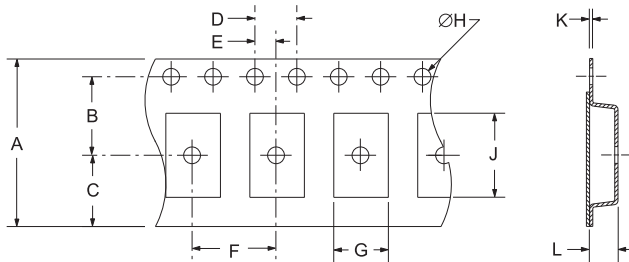
ALL DIMENSIONS IN MILLIMETERS



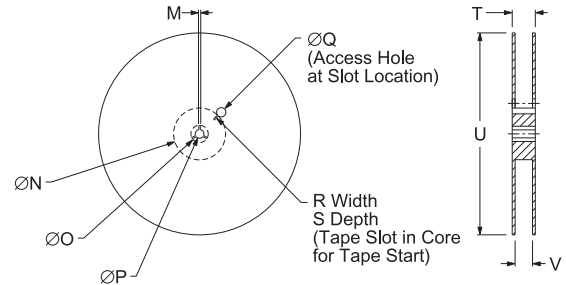
Tolerances = ±0.1

TAPE AND REEL DIMENSIONS

ALL DIMENSIONS IN MILLIMETERS



TAPE	A	B	C	D	E
	16±.3	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

Fine Leak Test
Gross Leak Test
Mechanical Shock
Vibration
Solderability
Temperature Cycling
Resistance to Soldering Heat
Resistance to Solvents

Specification

MIL-STD-883, Method 1014, Condition A
MIL-STD-883, Method 1014, Condition C
MIL-STD-202, Method 213, Condition C
MIL-STD-883, Method 2007, Condition A
MIL-STD-883, Method 2002
MIL-STD-883, Method 1010
MIL-STD-202, Method 210
MIL-STD-202, Method 215

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
Eclipse Manufacturing Identifier

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EC26	CERAMIC	3.3V	OS30	03/09