

Marketing Bulletin

DATE: September 20th, 2006

TO: All Sales Personnel

FROM: Mark Stoner

RE: Product Termination

To all concerned parties,

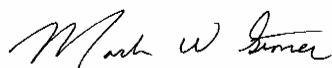
This bulletin is to notify all customers of the discontinuation of the following Ecliptek series effective September 20th, 2006:

Series	Description	Recommended Replacement
EC33	2.5V 4 pad SMD Plastic Oscillator	EC27 or EC37

In compliance with our End of Life (EOL) policy, this will serve as advanced notice of product termination. New orders will not be accepted after March 31st, 2007, with delivery to conclude by September 30th 2007.

If there are any questions pertaining to this bulletin, please feel free to contact me. Thank you again for your cooperation.

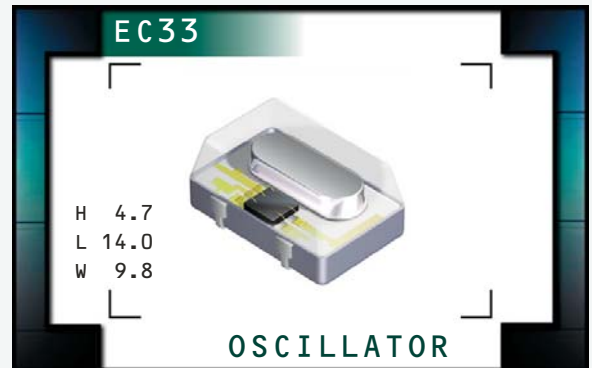
Best Regards,



Mark W. Stoner
Vice President of Marketing
Ecliptek Corporation

EC33 Series

- Plastic surface mount package
- 2.5V supply voltage
- HCMOS output
- Stability to ± 50 ppm
- Available on tape and reel



NOTES

OBSOLETE

ELECTRICAL SPECIFICATIONS

Frequency Range (MHz)		1.544MHz to 32.768MHz
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})		2.5V _{DC} $\pm 5\%$
Aging (at 25°C)		± 5 ppm / year Maximum
Input Current	≤ 24.000 MHz	10mA Maximum
	> 24.000 MHz	20mA Maximum
Frequency Tolerance / Stability*	Inclusive of Operating Temperature Range, Supply Voltage, and Load	± 100 ppm Maximum or ± 50 ppm Maximum (0°C to 70°C only)
Output Voltage Logic High (V_{OH})		90% of V_{DD} Minimum $I_{OH} = -4$ mA
Output Voltage Logic Low (V_{OL})		10% of V_{DD} Maximum $I_{OL} = +4$ mA
Rise Time / Fall Time	≤ 24.000 MHz 20% to 80% of Waveform	6 nSec Maximum
	> 24.000 MHz 20% to 80% of Waveform	4 nSec Maximum
Duty Cycle	at 50% of Waveform	50 ± 10 (%) (Standard) or 50 ± 5 (%) (Optional)
Load Drive Capability		15pF HCMOS Load Maximum
Tri-State Input Voltage	No Connection	Enables Output
	$V_{IH} \geq 90\%$ of V_{DD}	Enables Output
	$V_{IL} \leq 10\%$ of V_{DD}	Disables Output: High Impedance
Start Up Time		10 mSeconds Maximum
Period Jitter: Absolute		± 100 pSeconds Maximum
Period Jitter: One Sigma		± 25 pSeconds Maximum

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EC33	PLASTIC	2.5V	OS93	08/06

PART NUMBERING GUIDE

EC33 00 SJ ETT TS - 25.000M TR

FREQUENCY TOLERANCE / STABILITY

00=±100ppm Maximum (Standard)
45=±50ppm Maximum

OPERATING TEMP. RANGE

Blank=0°C to 70°C
ET=-40°C to 85°C

DUTY CYCLE

Blank=50 ±10% (Standard)
T=50 ±5%

PACKAGING OPTIONS

Blank=Bulk
TR=Tape and Reel (Standard)

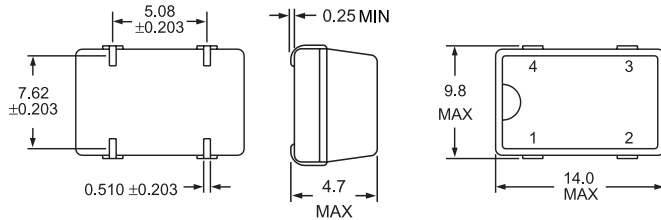
FREQUENCY

OUTPUT CONTROL FUNCTION

TS=Tri-State Enable High

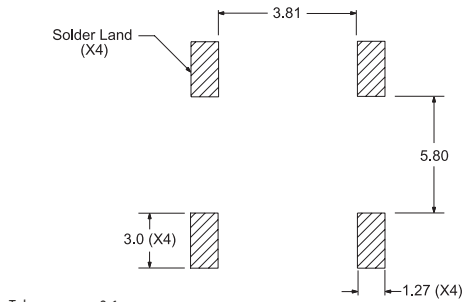
OBSOLETE

MECHANICAL DIMENSIONS ALL DIMENSIONS IN MILLIMETERS



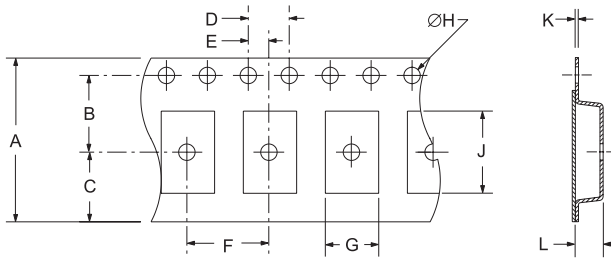
Pin 1: Tri-State
Pin 2: Case Ground
Pin 3: Output
Pin 4: Supply Voltage

SUGGESTED SOLDER PAD LAYOUT ALL DIMENSIONS IN MILLIMETERS

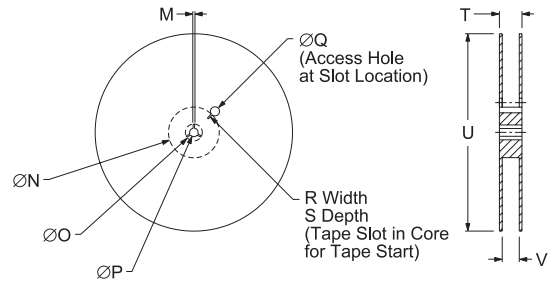


Tolerances = ±0.1

TAPE AND REEL DIMENSIONS ALL DIMENSIONS IN MILLIMETERS



TAPE	A	B	C	D	E
	24 ±.3	11.5 ±.1	10.75 ±.1	4 ±.2	2 ±.1
F	G	H	J	K	L
12 ±.2	B0*	1.5 +.1-0	A0*	.3 ±.1	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	30.4 MAX	360 MAX	24.4+2-0	1000

*Compliant to EIA 481A

ENVIRONMENTAL/MECHANICAL SPECIFICATIONS

Characteristic	Specification
Seal Integrity	Bubble test in Perfluorocarbon at +125°C ±5°C for 60 seconds minimum (internal crystal only).
Solderability	Sn63 Solder dip at +230°C ±5°C for 5 seconds/95% coverage.
Marking Permanency	10 Strokes with brush after 1 minute soak in solvent, 3 times.
Shock	Random drop on hard wooden plate 3 times from a height of 20cm.
Vibration	Frequency with an amplitude of 1.5mm sweeping between 10Hz to 55Hz within 1 minute (approximately) for 2 hours minimum on each axis (X, Y and Z) for a total of 6 hours.

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	EC33	PLASTIC	2.5V	OS93	08/06