ECLIPTEK® CORPORATION

Marketing Bulletin

DATE: January 10th, 2007

TO: All Sales Personnel

FROM: Isaac Gonzalez

RE: Product Termination

To all concerned parties,

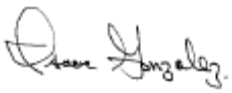
This bulletin is to notify all customers of the discontinuation of the following Ecliptek series effective January 10th, 2008:

Series	Description	Recommended Replacement
EPS13D3	RoHS Compliant (Pb-free) 3.3V 6Pad 5mmx7mm Spread Spectrum Programmable Oscillator	EPSA13

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 June 10th, 2008, with delivery to conclude by September 10th, 2008.

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

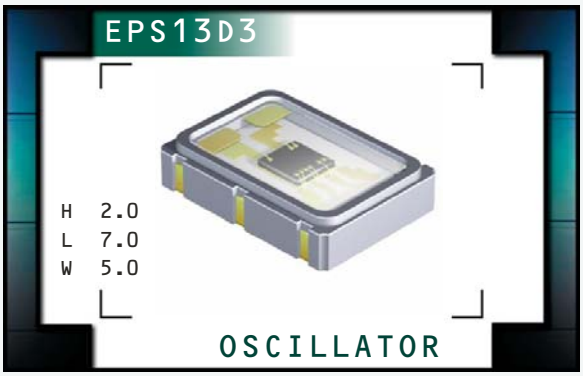
Best Regards,



Isaac Gonzalez
Configuration Manager
Ecliptek Corporation

EPS13D3 Series

- RoHS Compliant (Pb-Free)
- EPS™ Spread Spectrum Programmable Clock Oscillators
- Ceramic 6-pad SMD Package
- Low EMI LVHCMOS Output
- 3.3V Supply Voltage
- Stability to 100ppm
- Center Spread and Down Spread Modulation
- Spread Spectrum Output Enable/Disable on Pad 2
- Tri-State and Power Down Options Available
- Available on Tape & Reel



ELECTRICAL SPECIFICAT

OBSOLETE

Nominal Frequency		4.318MHz to 166.000MHz
Operating Temperature Range		20°C to 70°C
Storage Temperature Range		55°C to 125°C
Supply Voltage (V_{DD})		$3.3V_{DC}$ ±$0.3V_{DC}$
Maximum Supply Voltage		-$0.5V_{DC}$ to $7.0V_{DC}$
Input Current	Unloaded; $V_{DD} = 3.3V_{DC}$	30mA Maximum
Frequency Tolerance / Stability	Inclusive of All Conditions: Frequency Stability over the Operating Temperature Range, Supply Voltage Change, Output Load Change, 1st Year Aging at 25°C, Shock, and Vibration	±100ppm Maximum
Output Voltage Logic High (V_{OH})	I_{OH} = -8mA	V_{DD}-$0.4V_{DC}$ Minimum
Output Voltage Logic Low (V_{OL})	I_{OL} = +8mA	$0.4V_{DC}$ Maximum
Rise Time / Fall Time	20% to 80% of waveform	2.7nSeconds Maximum
Duty Cycle	at 50% of waveform	50 ±10(%) 50 ±5(%)
Load Drive Capability		15pF HCMOS Load Maximum
Output Control Function	Internal Pull Down Resistor of 100kOhms Typical on Pad 4, Internal Pull Up Resistor of 100kOhms Typical on Pad 1	Tri-State or Power Down
Tri-State/Power Down Input Voltage	V_{IH} of 70% of V_{DD} Minimum No Connection V_{IL} of 30% of V_{DD} Maximum	Enables Output Enables Output Disables Output: High Impedance
Power Down Output Disable Time		350nSec Maximum
Power Down Output Enable Time		3mSec Maximum
Standby Current	Unloaded; Pad 1 = Ground; $V_{DD} = 3.3V_{DC}$	50µA Maximum
Tri-State Output Disable Time		350nSec Maximum
Tri-State Output Enable Time		350nSec Maximum
Disable Current	Unloaded; Pad 1 = Ground; $V_{DD} = 3.3V_{DC}$	20mA Maximum
Spread Spectrum Output Control Function	Internal Pull Down Resistor of 100kOhms Typical on Pad 2	Spread Spectrum Enable Low
Spread Spectrum Input Voltage	V_{IH} of 70% of V_{DD} Minimum No Connect V_{IL} of 30% of V_{DD} Maximum	Disables Spread Spectrum-On Output Enables Spread Spectrum-On Output Enables Spread Spectrum-On Output
Spread Spectrum-On Input Pulse Width		250µSec Minimum
Spread Spectrum-On Output Enable Time	Spread Spectrum-Off to Spread Spectrum-On	100µSec Maximum
Spread Spectrum-On Output Disable Time	Spread Spectrum-On to Spread Spectrum-Off	600µSec Maximum
Spread Spectrum Percentage	±0.25%, ±0.50%, ±0.75%, ±1.0%, ±1.5%, ±2.0% -0.50%, -1.0%, -1.5%, -2.0%, -3.0%, -4.0%	Center Spread Down Spread
Modulation Frequency		30kHz Minimum, 31.5kHz Typical, 33kHz Maximum
Period Jitter	Cycle to Cycle; Spread Spectrum-On; $V_{DD} = 3.3V_{DC}$	700pSec Maximum < 25.000MHz 400pSec Maximum 25.000MHz to 133.000MHz 300pSec Maximum > 133.000MHz
Aging	First Year at 25°C	±5ppm Maximum
Start Up Time		10mSec Maximum

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EPS13D3	CERAMIC	3.3V	OS2V	06/06

PART NUMBERING GUIDE

EPS13D3 C 1 H A - 44.736M TR

FREQUENCY TOLERANCE & STABILITY/ OPERATING TEMPERATURE RANGE
C=±100ppm Maximum over -20°C to +70°C

DUTY CYCLE
1=50% ±10%, 2=50% ±5%

LOGIC CONTROL/ADDITIONAL OUTPUT
H=Tri-State
J=Power Down

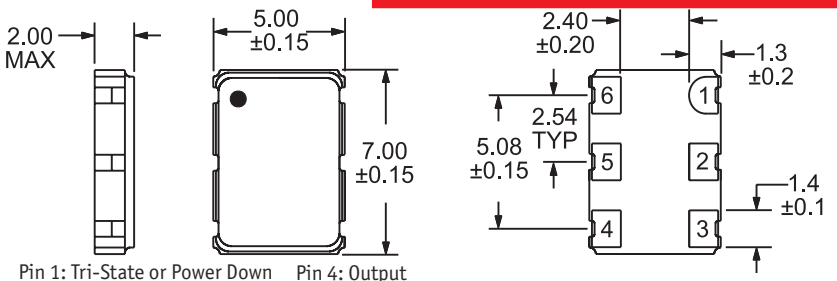
AVAILABLE OPTIONS
Blank=Tubes
TR=Tape and Reel (Standard)

FREQUENCY

SPREAD SPECTRUM PERCENTAGE
A = ±0.25% Center Spread
B = ±0.50% Center Spread
C = ±0.75% Center Spread
G = -0.50% Down Spread
H = -1.00% Down Spread
J = -1.50% Down Spread
L = -2.00% Down Spread
N = -3.00% Down Spread
P = -4.00% Down Spread

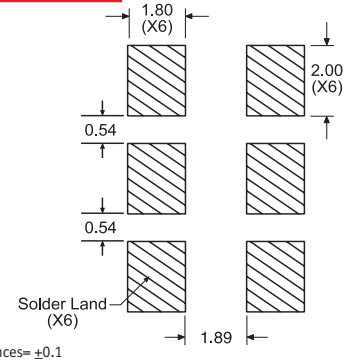
OBSOLETE

MECHANICAL DIMENSIONS
ALL DIMENSIONS IN MILLIMETERS



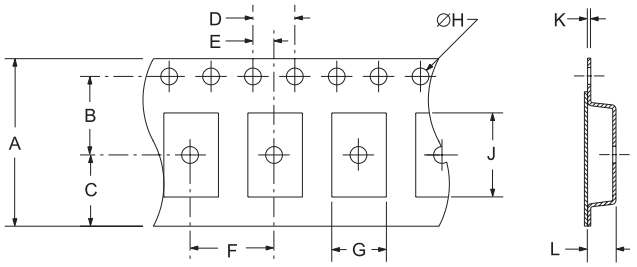
Pin 1: Tri-State or Power Down
Pin 2: Spread Spectrum
Pin 3: Case Ground
Pin 4: Output
Pin 5: No Connect
Pin 6: Supply Voltage

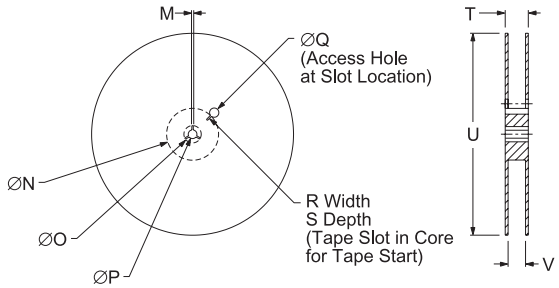
SUGGESTED SOLDER PAD LAYOUT
MILLIMETERS



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	Specification
Fine Leak Test	MIL-STD-883, Method 1014, Condition A
Gross Leak Test	MIL-STD-883, Method 1014, Condition C
Mechanical Shock	MIL-STD-202, Method 213, Condition C
Vibration	MIL-STD-883, Method 2007, Condition A
Solderability	MIL-STD-883, Method 2002
Temperature Cycling	MIL-STD-883, Method 1010
Resistance to Soldering Heat	MIL-STD-202, Method 210
Resistance to Solvents	MIL-STD-202, Method 215

MARKING SPECIFICATIONS

Line 1: ECLIPTEK

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

Line 3: S XX Y ZZ
- Week of Year
- Last Digit of Year
- Ecliptek Manufacturing Identifier
- Configuration Designator

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EPS13D3	CERAMIC	3.3V	OS2V	06/06