ECLIPTEK® CORPORATION

Marketing Bulletin

DATE: March 28th, 2008

TO: All Sales Personnel

FROM: Isaac Gonzalez

RE: Product Termination

To all concerned parties,

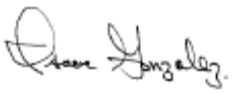
This bulletin is to notify all customers of the discontinuation of the following Ecliptek series effective March 28th, 2008:

Series	Description	Recommended Replacement
EPS13H2	RoHS Compliant (Pb-free) 3.3V 8-Pin DIP LVHCMOS Programmable Spread Spectrum Oscillator	EPS13D2

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 January 28th, 2009, with delivery to conclude by March 28th, 2009.

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

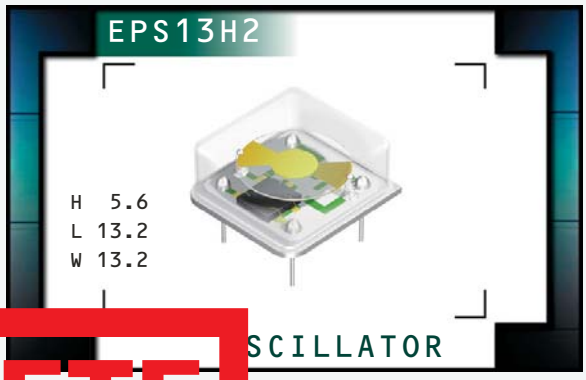
Best Regards,



Isaac Gonzalez
Configuration Manager
Ecliptek Corporation

EPS13H2 Series

- RoHS Compliant (Pb-Free)
- EPS™ Spread Spectrum Programmable Clock Oscillators
- 8-pin DIP Package
- Low EMI LVHCMOS Output
- 3.3V Supply Voltage
- Stability to 100ppm
- Center Spread and Down Spread Modulation
- Tri-State and Power Down Options Available



OBSOLETE

ELECTRICAL SPECIFICATION

Nominal Frequency		14.318MHz 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 Pin 5, Internal Pull Up Resistor of 100kOhms Typical on Pin 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; Pin 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; Pin 1 = Ground; $V_{DD} = 3.3V_{DC}$	20mA 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	EPS13H2	8-Pin DIP	3.3V	OS3F	09/04

PART NUMBERING GUIDE

EPS13H2 C 1 H A - 44.736M - G 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
H=Tri-State
J=Power Down

SPREAD SPECTRUM PERCENTAGE
A = ±0.25% Center Spread
B = ±0.50% Center Spread
C = ±0.75% Center Spread
D = ±1.00% Center Spread
E = ±1.50% Center Spread
F = ±2.00% 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

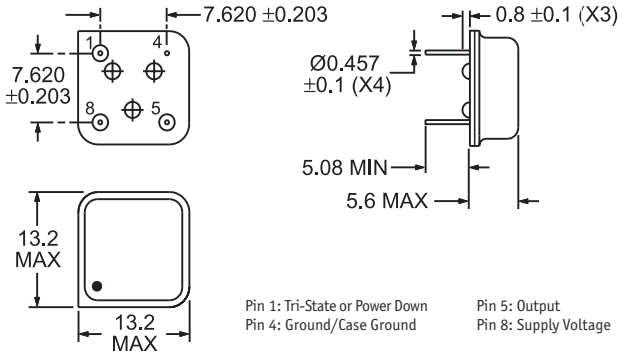
FREQUENCY

AVAILABLE OPTIONS
Blank=None (Standard)
CB=Cut Leads to 2.540 ±0.500 (0.100" ±0.020")
CC=Cut Leads to 3.175 ±0.500 (0.125" ±0.020")
CD=Cut Leads to 3.810 ±0.500 (0.150" ±0.020")
CE=Cut Leads to 4.445 ±0.500 (0.175" ±0.020")
G=Gull Wing
G2=Gull Wing (Alternate)

PACKAGING OPTIONS
Blank=Bulk (Standard)
TR=Tape & Reel (only offered with Gull Wing options G and G2)

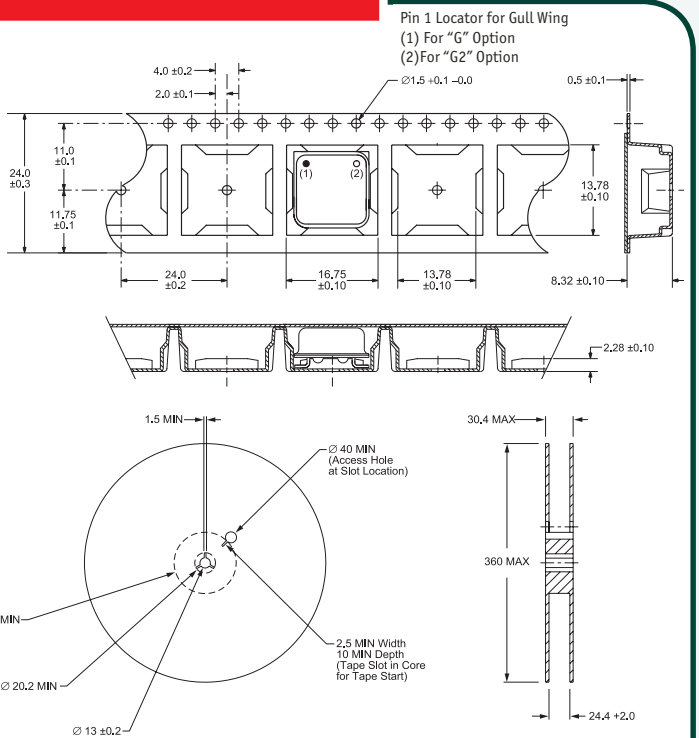
OBSOLETE

MECHANICAL DIMENSIONS
ALL DIMENSIONS IN MILLIMETERS



Pin 1: Tri-State or Power Down
Pin 4: Ground/Case Ground
Pin 5: Output
Pin 8: Supply Voltage

TAPE AND REEL DIMENSIONS



250 Pieces Per Reel
Compliant to EIA-481A

MARKING SPECIFICATIONS

Line 1: ECLIPTEK

Line 2: EPS13 TS
- Output Control Function
  - PD = Power Down
  - TS = Tri-State Enable High
- Series Designator

Line 3: XX.XXX M
- Frequency in MHz (5 Digits Maximum + Decimal)

Line 4: XX Y ZZ
- Week of Year
- Last Digit of Year
- Ecliptek Manufacturing Identifier

Note: Pin 1 shall be designated with a dot

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
Lead Integrity	MIL-STD-883, Method 2004
Solderability	MIL-STD-883, Method 2002
Temperature Cycling	MIL-STD-883, Method 1010
Resistance to Soldering Heat	MIL-STD-883, Method 210
Resistance to Solvents	MIL-STD-883, Method 215

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EPS13	8 pin DIP	3.3V	OS3F	09/04