

## Marketing Bulletin

**DATE:** Saturday, April 01, 2000  
**TO:** Affected Customers  
**FROM:** Marketing  
**RE:** ECH13 Series Termination

To all concerned parties,

This bulletin is to notify all customers of the discontinuation of the ECH13 series Ecliptek oscillator effective Saturday, April 01, 2000.

In compliance with our End of Life (EOL) policy, this notice will serve as advanced notice of product termination. New orders will not be accepted after Saturday, July 01, 2000, with delivery to be conclude by Saturday, September 30, 2000.

The EH13 series is a recommended alternate for the ECH13 series. This may not be an exact cross, so it is highly recommended that the data sheet(s) of the recommended alternate are reviewed and samples tested to ensure conformance.

If there are any questions pertaining to this bulletin, please contact your Ecliptek sales representative. Thank you again for your cooperation.

Ecliptek Marketing

## STANDARD SPECIFICATIONS

Frequency Range:	70.000MHz to 155.520MHz
Frequency Tolerance/Stability:	(All Values Inclusive of Operating Temp. Range, Supply Voltage, and Load)
00	±100ppm Max.
45	±50ppm Max.
25	±25ppm Max.
20	±20ppm Max. (0°C to +70°C only)
Operating Temperature Range	0°C to +70°C
ET	-40°C to +85°C
Storage Temperature Range	-55°C to +125°C
Supply Voltage	3.3Vdc ±0.3Vdc
Input Current	35mA Maximum
Output Voltage Logic High	2.4Vdc Min. w/TTL Load, 2.7Vdc Min. w/HCMOS Load
Output Voltage Logic Low	0.4Vdc Max. w/TTL or HCMOS Load
Rise/Fall Time	3nSec Maximum (0.4Vdc to 2.4Vdc)
Duty Cycle	50% ±10% (@ 1.4Vdc)
T	50% ±5% (@ 1.4Vdc)
Load Drive Capability	5TTL Load or 15pF HCMOS Load Maximum
Aging @ 25°C	±5ppm/year
Pin 1 Connection	No Connect
TS	Tri-State (High Impedance)
Tri-State Input Voltage (V <sub>IH</sub> & V <sub>IL</sub> )	+2.2Vdc Min. to Enable Output, +0.8Vdc Max. to Disable Output (High Impedance), No Connect to Enable Output
Absolute Clock Jitter	±200pSec Maximum
One Sigma Clock Period Jitter	±50pSec Maximum
Start Up Time	10 mSec Maximum

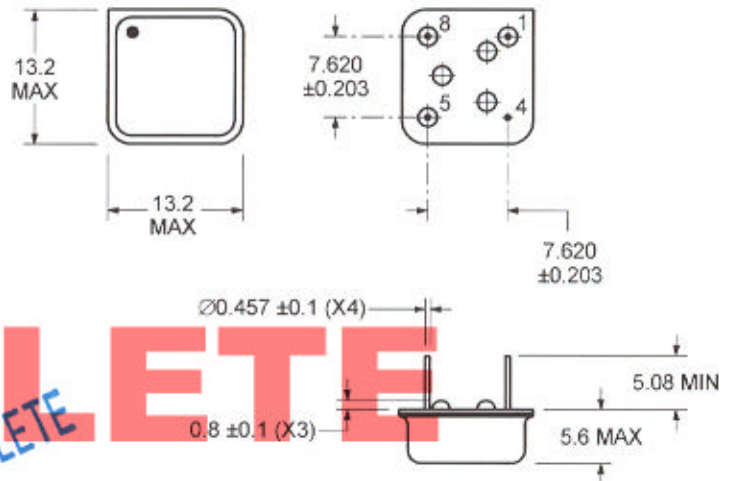
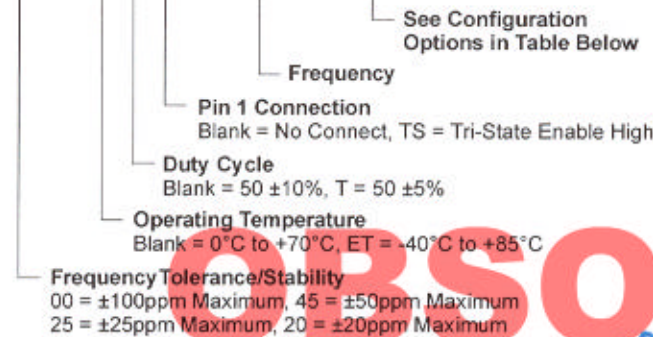
ORIGINAL  
IF IN RED

## ENVIRONMENTAL & MECHANICAL

Shock:	Conditions and Criteria Listed in TQC41-883-007
Vibration:	Conditions and Criteria Listed in TQC41-883-008
Seal Integrity:	Conditions and Criteria Listed in TQC41-883-003
Solderability:	Conditions and Criteria Listed in TQC41-883-004 / 95% coverage
Marking Permanency:	Conditions and Criteria Listed in TQC41-883-001

### PART NUMBERING GUIDE

**ECH13 00 HS ET T TS - 24.000M - CL125**



### MARKING GUIDE

(Line #1) **ECLIPTEK**

(Line #2) **ECH13 TS**

Pin 1 Connection  
Blank = No Connect, TS = Tri-State

(Line #3) **XX.XXXM**

Frequency

(Line #4) **XX Y ZZ**

Week of Year  
Last Digit of Year

Ecliptek Manufacturing Code per TEN02-001-000



PIN	CONNECTION
1	No Connect or Tri-state
4	Ground/Case Ground
5	Output
8	Supply Voltage

ALL DIMENSIONS  
IN MILLIMETERS

### SPECIFICATION CONTROL DRAWING

	ECLIPTEK <sup>®</sup> CORPORATION	Drawing Number <b>CSC02-210-000</b>

Title  
**HALF SIZE HIGH FREQUENCY 3.3Vdc OSCILLATOR**

### CONFIGURATION OPTIONS

CLXXX = Cut Leads (MAL02-101-000)

G = Gull Wing (MAL02-001-000) G2 = Gull Wing (MAL02-011-000)

OBSOLETE

## STANDARD SPECIFICATIONS

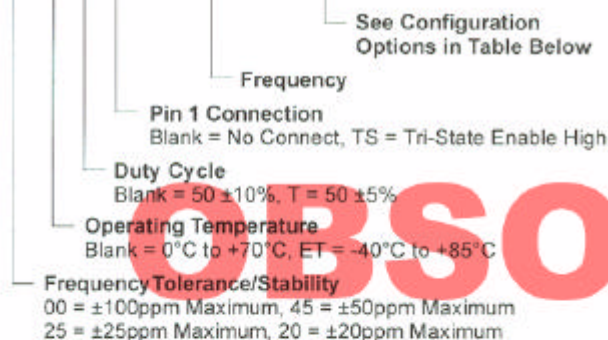
Frequency Range:	70.000MHz to 155.520MHz	<b>ORIGINAL IF IN RED</b>
Frequency Tolerance/Stability:	(All Values Inclusive of Operating Temp. Range, Supply Voltage, and Load)	
00	±100ppm Max.	
45	±50ppm Max.	
25	±25ppm Max.	
20	±20ppm Max. (0°C to +70°C only)	
Operating Temperature Range	0°C to +70°C	
ET	-40°C to +85°C	
Storage Temperature Range	-55°C to +125°C	
Supply Voltage	3.3Vdc ±0.3Vdc	
Input Current	35mA Maximum	
Output Voltage Logic High	2.4Vdc Min. w/TTL Load, 2.7Vdc Min. w/HCMOS Load	
Output Voltage Logic Low	0.4Vdc Max. w/TTL or HCMOS Load	
Rise/Fall Time	3nSec Maximum (0.4Vdc to 2.4Vdc)	
Duty Cycle	50% ±10% (@ 1.4Vdc)	
T	50% ±5% (@ 1.4Vdc)	
Load Drive Capability	5TTL Load or 15pF HCMOS Load Maximum	
Aging @ 25°C	±5ppm/year	
Pin 1 Connection	No Connect	
TS	Tri-State (High Impedance)	
Tri-State Input Voltage (V <sub>IH</sub> & V <sub>IL</sub> )	+2.2Vdc Min. to Enable Output, +0.8Vdc Max. to Disable Output (High Impedance), No Connect to Enable Output	
Absolute Clock Period Jitter	±200pSec Maximum	
One Sigma Clock Period Jitter	±50pSec Maximum	
Start Up Time	10mSec Maximum	

## ENVIRONMENTAL & MECHANICAL

Shock:	Conditions and Criteria Listed in TQC41-883-007
Vibration:	Conditions and Criteria Listed in TQC41-883-008
Seal Integrity:	Conditions and Criteria Listed in TQC41-883-003
Solderability:	Conditions and Criteria Listed in TQC41-883-004 / 95% coverage
Marking Permanency:	Conditions and Criteria Listed in TQC41-883-001

### PART NUMBERING GUIDE

**ECH13 00 ET T TS - 70.000M - CL125**



### MARKING GUIDE

(Line #1) **ECLIPTEK**

(Line #2) **ECH13 TS**

Pin 1 Connection  
Blank = No Connect, TS = Tri-State

(Line #3) **XX.XXXM**

Frequency

(Line #4) **XX Y ZZ**

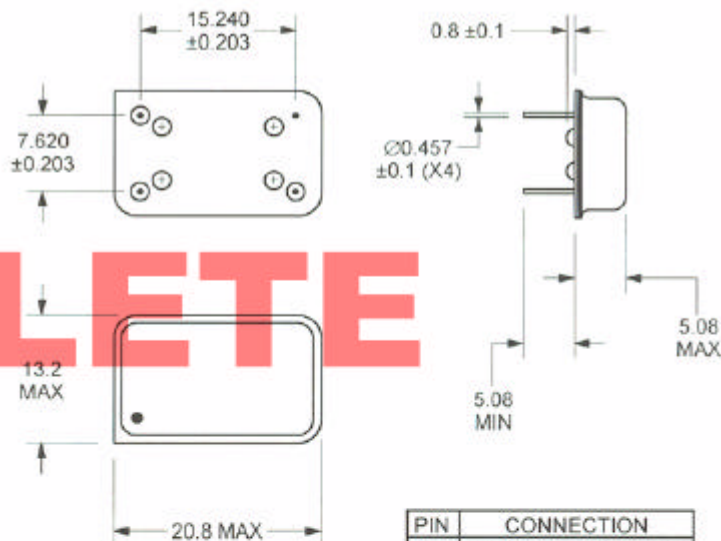
Week of Year  
Last Digit of Year

Ecliptek Manufacturing Code per TEN02-001-000



**NOTE:** Pin 1 shall be marked with a black dot. Marking shall conform to conditions listed in TQC41-001-000.

OBSOLETE



ALL DIMENSIONS  
IN MILLIMETERS

PIN	CONNECTION
1	No Connect or Tri-state
7	Ground/Case Ground
8	Output
14	Supply Voltage

### SPECIFICATION CONTROL DRAWING

	Drawing Number <b>CSC01-210-000</b>
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Title  
**FULL SIZE HIGH FREQUENCY 3.3Vdc OSCILLATOR**

### CONFIGURATION OPTIONS

CLXXX = Cut Leads (MAL01-101-000)  
G = Gull Wing (MAL01-001-000)