

STANDARD SPECIFICATIONS

Frequency Range:	9.600MHz to 35.000MHz
Frequency Stability: vs. Input Voltage ($\pm 5\%$) vs. Load ($\pm 2\text{pF}$) vs. Aging (at 25°C)	See Table 1 for Maximum Values (Inclusive of Operating Temperature Range) $\pm 0.3\text{ppm}$ Maximum $\pm 0.3\text{ppm}$ Maximum $\pm 1\text{ppm/year}$ Maximum
Operating/Storage Temp. Range	See Table 1 for Operating Temperature Range / Storage -40°C to +85°C
Supply Voltage	3.3Vdc $\pm 5\%$
Input Current	10mA Maximum $\leq 20.000\text{MHz}$, 20mA Maximum $> 20.000\text{MHz}$
Output Voltage Logic High	2.7Vdc Minimum
Output Voltage Logic Low	0.5Vdc Maximum
Rise/Fall Time	10nSec. Maximum (20% to 80% of waveform)
Duty Cycle	50% $\pm 10\%$ (@50% of waveform)
Load Drive Capability	15pF HCMOS Load Maximum
Internal Trim (Top of Can)	$\pm 3\text{ppm}$ Minimum
Pin 1 Control Voltage Blank V	No Connect (Pin 1 not present) 1.65Vdc $\pm 1.35\text{Vdc}$, Positive Transfer Characteristic
Frequency Deviation	$\pm 5\text{ppm}$ Minimum over Control Voltage
Typical Phase Noise	-85dBc/Hz at 10Hz Offset, -115dBc/Hz at 100Hz Offset, -135dBc/Hz at 1kHz Offset, -140dBc/Hz at 10kHz Offset, -145dBc/Hz at 100kHz Offset, -150dBc/Hz at 1MHz Offset

OBSOLETE

ENVIRONMENTAL & MECHANICAL

Fine Leak Test:	MIL-STD-883, Method 1014, Condition A	Solderability:	MIL-STD-883, Method 2002
Gross Leak Test:	MIL-STD-883, Method 1014, Condition C	Temperature Cycling:	MIL-STD-883, Method 1010
Mechanical Shock:	MIL-STD-202, Method 213, Condition C	Resistance to Soldering Heat:	MIL-STD-202, Method 210
Vibration:	MIL-STD-883, Method 2007, Condition A	Resistance to Solvents:	MIL-STD-202, Method 215
Lead Integrity:	MIL-STD-883, Method 2004		

TABLE 1: PART NUMBERING CODES

OPERATING TEMPERATURE		FREQUENCY STABILITY						
		X Denotes availability from 9.600MHz to 25.000MHz Y Denotes availability for any valid frequency.						
Range	Code	15 $\pm 1.5\text{ppm}$	20 $\pm 2.0\text{ppm}$	25 $\pm 2.5\text{ppm}$	30 $\pm 3.0\text{ppm}$	35 $\pm 3.5\text{ppm}$	50 $\pm 5.0\text{ppm}$	Code Range
0°C to +50°C	A	Y	Y	Y	Y	Y	Y	
-10°C to +60°C	B	Y	Y	Y	Y	Y	Y	
-20°C to +70°C	C	X	Y	Y	Y	Y	Y	
-30°C to +60°C	D		X	Y	Y	Y	Y	
-30°C to +75°C	E		X	X	Y	Y	Y	
-35°C to +80°C	F			X	X	Y	Y	
-40°C to +85°C	G				X	X	Y	

MARKING GUIDE

(Line #1) **ECLIPTEK**

(Line #2) **EC53 00 X Y**

Pin 1 Connection
Blank = No Connect (pin 1 not present)
V = Control Voltage 1.65Vdc $\pm 1.35\text{Vdc}$
Positive Transfer Characteristic

Operating Temperature
Code Per Table 1

Frequency Stability
Code Per Table 1

PART NUMBERING GUIDE

EC53 25 E V - 12.800M

Frequency

Pin 1 Connection
Blank = No Connect (pin 1 not present)
V = Voltage Control

Operating Temperature Range Code Per Table 1

Frequency Stability Code Per Table 1

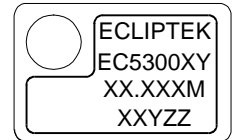
(Line #3) **XX.XXXM**

Frequency

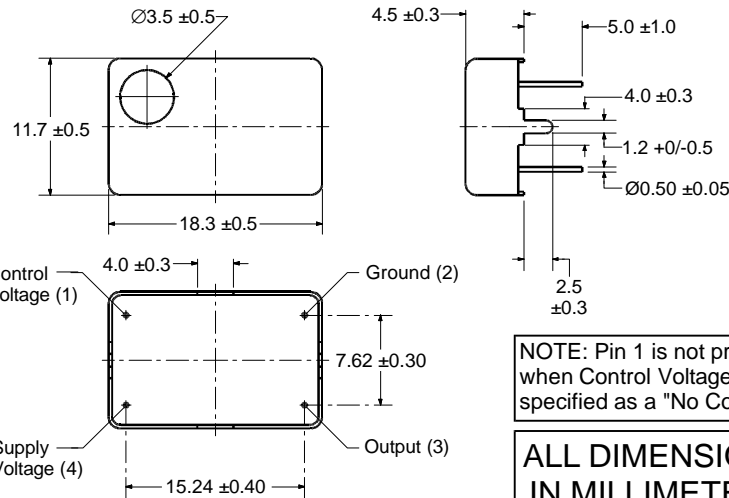
(Line #4) **XX Y ZZ**

Week of Year
Last Digit of Year

Ecliptek Manufacturing Code (Per TEN02-001-000)



NOTE: Marking shall conform to conditions listed in TQC41-001-000.



NOTE: Pin 1 is not present when Control Voltage is specified as a "No Connect"

ALL DIMENSIONS IN MILLIMETERS

SPECIFICATION CONTROL DRAWING

	Drawing Number CSC06-110-000
Title 4.5mm THRU-HOLE 3.3Vdc HCMOS/TTL TCXO	
Revision C	Effectivity Date 05-02-03
ECN Number 8400	PAGE 1 OF 2
Approved By	Date
Released By	Date

CLASS/SUBCLASS: OS62