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SPECIFICATIONS

Customer Date

ate : 2005. 10. 15.

SPEC. NO. :

PART CODE : TCXO-PB33L-20.000MHz

A. REQUIREMENTS

Model TCXO Size CRM5032-4PB

Packing Marking

Power

Vcc 3.3+/- 0.165 V lcc 5 mA max.

Waveform

Output Clipped Sine

Load 10Kohm // 10pF **Vpp** 0.8 Vpp min

VH VL Tr Tf

Symmetry

Phase Noise

10Hz 100Hz 1KHz 10KHz **Frequency**

Pin 3 20.000MHz

Stability

Overall

Tolerance at 25 C +/- 0.5ppm typ +/-2.5ppm max

Drift over Temp. +/- 1.5ppm typ

Aging / 1yr +/- 1.0ppm max

Aging / 5yrs

Vcc Change +/- 0.3ppm max Load Change +/- 0.3ppm max

Temperature Range

Operating Temp. -30~50 C Storage Temp. -40~90 C

Operable Temp.

Control Option

Enable Disable

Vc (VCXO)

Slope

Pull Min.

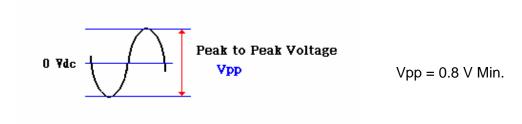
Pull Max.

Linearity

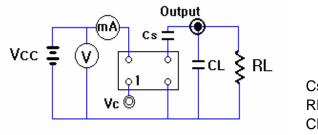
MBW

Input-Z Trimmer Adj.

B. Waveform



C. Test Circuit

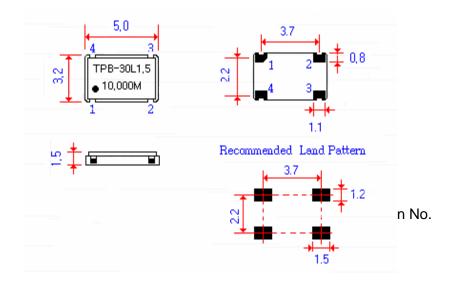


 $Cs = 1nF \sim 10nF$ RL = 10KohmCL = 10pF

D. VCXO Pull Range

NA

E. Dimensions (in mm)



Pin Information

Content		
1	N.C.	
2	GND	
3		
4	Vdd	

F. Mechanical and Environmental Specifications

Test Items	Test Conditions	Test Result
Shock Resistance	Natural drop on a hard wood board from a height of 75cm, three times.	Frequency and other characteristics must remain within specifications.
Vibrations	Vibration with amplitude of 0.762mm and sweep time of 1minute at 10 to 55Hz for 2 hours	Frequency and other characteristics must remain within specifications.
Lead Strength		
Solderability	Dipping in solder $(230^\circ\!$	More than 95% of surface should be coated uniformly with solder.
Resistance to solder Heat	Dipping in solder (260 $^{\circ}$ C ± 5 $^{\circ}$ C) for 10sec	Frequency and other characteristics must remain within specifications.
Temperature Cycle	Thermal shock 3 cycles of dwell in baths of -55 $^{\circ}$ for 30min. , 25 $^{\circ}$ for 15min. , 85 $^{\circ}$ for 30min. , 25 $^{\circ}$ for 15min.	Frequency and other characteristics must remain within specifications.
Moisture Resistance	Exposure to temperature of 40 $^{\circ}$ and humidity of 90%RH for 96hours	There should be no strain on surface of products.
Aging	30 days @85 $℃$ or 7 days @105 $℃$	Deviation of frequency must be less than specification.
Hermetic Seal	Fine Leak Detector Gross Leak Test after air pressure 5Kg/cm3 for 3 minutes	Leak rate less than 2 x 10-8 Atmos cc/sec of Helium. Air bubble would not be found in de-ionized H2O.

G. Quality Control

1. Lot Size 10,000 pcs max.

2. Sampling Inspection Plan MIL-STD-105D General-II , 1 Time Sampling

3. Inspection Level * Critical Defect : AQL 0.065 %

* Major Defect : AQL 0.250 %

* Minor Defect : AQL 0.650 %