

Features and Benefits

10 MHz Clipped Sine Wave VCTCXO
 3.3V Supply
 +/- 1ppm stability over -30°C to +85°C
 2.5mm x 2.0mm x 0.9mm package
 SMD Ceramic Enclosure

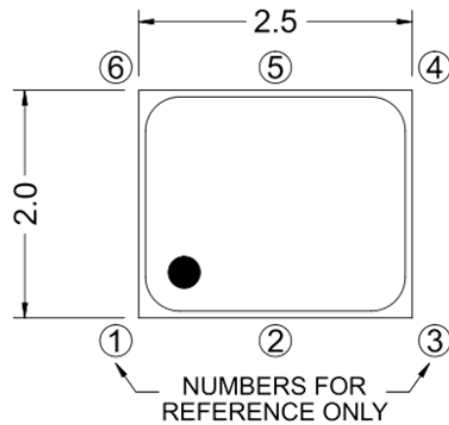
Typical Applications

Wireless Communications Broadband Access
 GPS Test Equipment
 Base Stations Handsets
 Point-to-Point Radios

Description

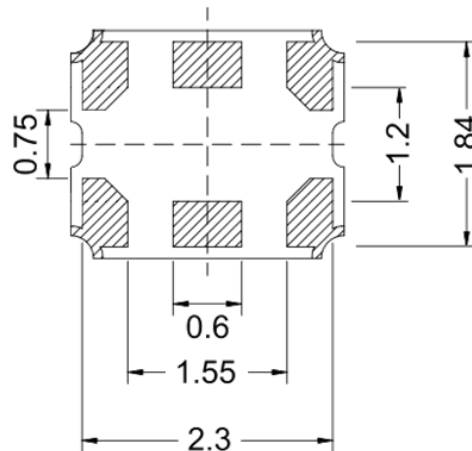
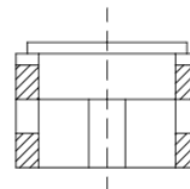
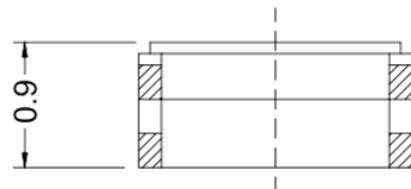
The TCXO2520 family offers low noise compensation techniques combined with aggressive conditioning processes resulting in outstanding long term stability, tightly distributed performance parameters, and superior long term reliability.

Mechanical Drawing & Pin Connections



PIN NO.	CONNECTION
1	Voltage Control
2	No Connection
3	Ground
4	Output Frequency
5	No Connection
6	Supply Voltage

MD140021-1
 Unit = mm



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency Range	F _{nom}			10.000000		MHz	
Clipped Sine Wave		Output Voltage Level	0.8			V	
		Output Voltage Level			2.0	V	
	Output Load			10 // 10		K pF	
	Start Time				2.0	ms	Milli-seconds
Power Supply							
Voltage				3.3		V	
Supply Current	current load				2.0	mA	
Voltage Control							
Control Voltage			0.5		2.5	V	
Pulling Range			± 5.0			ppm	
Input Impedance			500			kΩ	
Frequency Stability							
Versus temperature		-30°C to +85°C	-1.0		+1.0	ppm	
Initial Accuracy			-1.0		+1.0	ppm	
Versus 5% change in supply voltage			-0.2		+0.2	ppm	
Versus 10% change in load			-0.2		+0.2	ppm	
Aging per year		First year @ 25°C	-1.0		+1.0	ppm	
SSB Phase noise @ 10.000 MHz		10 Hz		-90.0		dBc/Hz	
		100 Hz		-115.0			
		1000 Hz		-135.0			
		10000Hz		-150.0			
Environmental Conditions							
Operating temperature range		-30°C to +85°C					
Storage temperature range		-55°C to +125°C					
Mechanical Shock		MIL-STD-883 Method 2002					
Mechanical Vibration		MIL-STD-883 Method 2007					
Temperature Cycle		MIL-STD 883 Method 1010					
Solderability		MIL-STD-883 Method 2003					
Fine and Gross Leak		MIL-STD-883 Method 1014					
Resistance to Solvents		MIL-STD-883 Method 2015					