

**Features and Benefits**

10MHz Clipped Sine Wave VCTCXO  
 3.3V Supply  
 +/- 1.5 ppm stability over -40°C to +85°C  
 2.5mm x 2.0mm x 0.9mm package  
 SMD Ceramic Enclosure

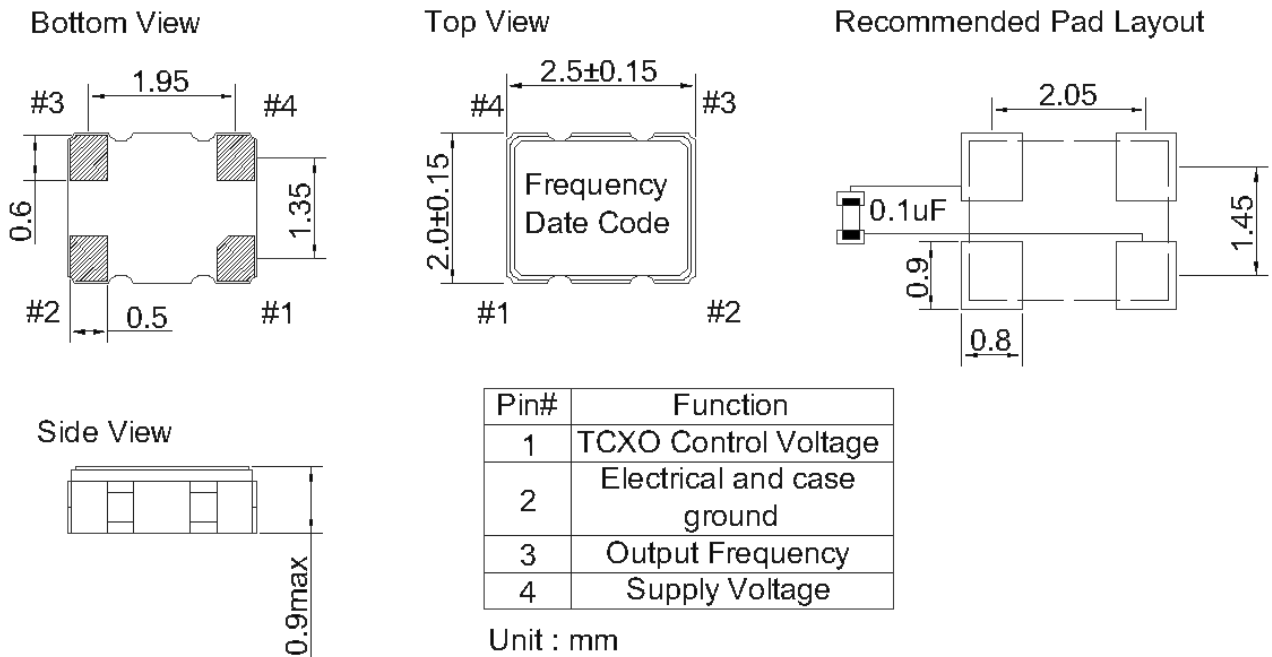
**Typical Applications**

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**



## Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency Range	F <sub>nom</sub>		10.000000			MHz	
Clipped Sine Wave		Output Voltage Level	0.8			V	
	Output Load			10 // 10		K // pF	
	Start Time				2.0	ms	Milli-seconds
<b>Power Supply</b>							
Voltage			3.135	3.3	3.465	V	
Supply Current	current load				2.0	mA	
<b>Voltage Control</b>							
Control Voltage			0.5		2.5	V	
Pulling Range			± 5.0			ppm	
Input Impedance			500			kΩ	
<b>Frequency Stability</b>							
Versus temperature		-40°C to +85°C	-1.5		+1.5	ppm	
Initial Accuracy			-1.0		+1.0	ppm	
Versus 5% change in supply voltage			-0.2		+0.2	ppm	
Versus load change			-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		-91.0		dBc/Hz	
		100 Hz		-115.0			
		1000 Hz		-134.0			
		10000Hz		-148.0			
<b>Environmental Conditions</b>							
Operating temperature range		-40°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					