

**Features and Benefits**

19.2 MHz CMOS Output Clock TCXO  
 3.3V Supply  
 +/- 0.5 ppm stability over -40°C to +85°C  
 Packaged in a 10-pad 5mm x 3.2mm x 1.55mm  
 SMD Ceramic Enclosure

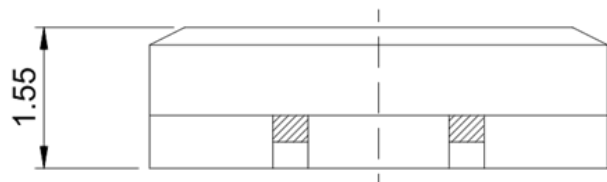
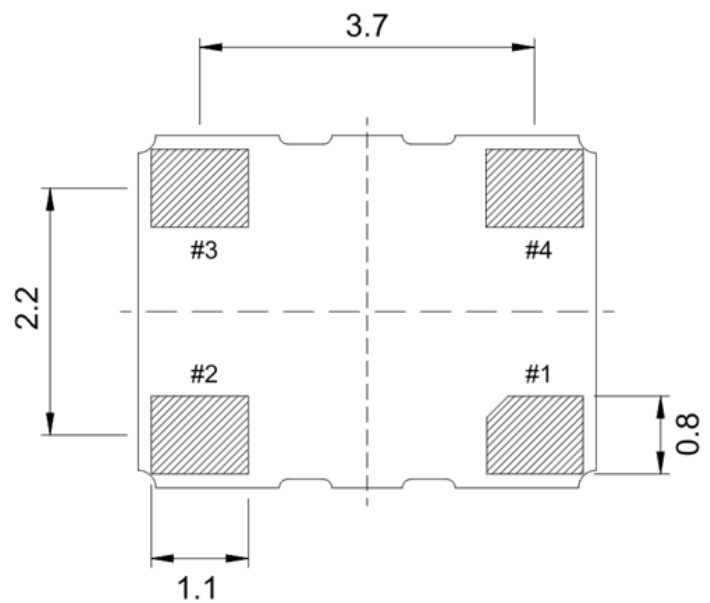
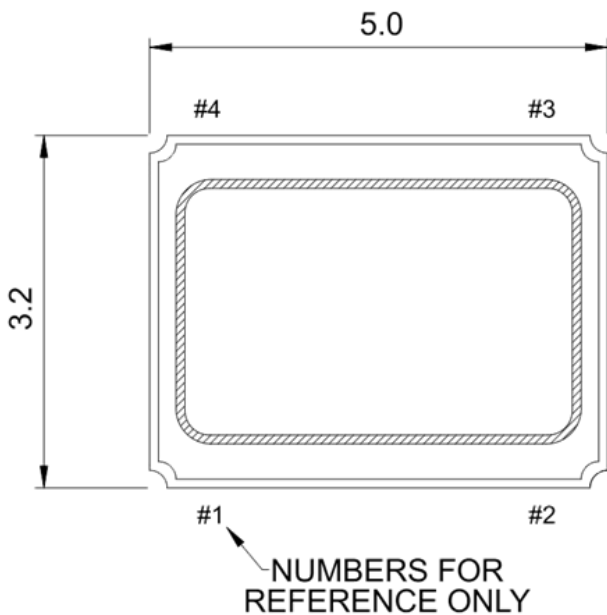
**Typical Applications**

Base Stations  
 10 G-bit Ethernet  
 SONET  
 GSM, CDMA, 3G, and 4G cellular

**Description**

The TCXO5300 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.	CONNECTIONS
1	No Connection
2	Ground
3	Output
4	Supply Voltage

MD140010-1  
 Unit = mm

## Specifications

Oscillator Specification		Sym	Condition	Value			Unit	Note
				Min.	Typ.	Max.		
Operational Frequency Range		F <sub>nom</sub>		19.200000			MHz	
CMOS	Logic Level 1			2.97			V	
	Logic Level 0					0.33	V	
	Output Load		Operating Range			15	pF	
	Duty Cycle			45	50	55	%	
	Rise and Fall times					8.0	ns	
	Start Time					2.0	ms	Milli-seconds
<b>Power Supply</b>								
Voltage				3.135	3.3	3.465	V	
			Supply Current under load			6.0	mA	
<b>Frequency Stability</b>								
Versus temperature			Ref. to +25°C reading	-500.0		+500.0	ppb	
Tolerance at 25°C			1 hr after 2 times reflow	-2000.0		+2000.0	ppb	After two reflows
Versus 5% change in supply voltage				-300.0		+300.0	ppb	
Versus 10% change in load				-200.0		+200.0	ppb	
Aging per year			First year @ 25°C	-1000.0		+1000.0	ppb	
SSB Phase noise (worst case) @19.2 MHz			100 Hz			-114.0	dBc/Hz	
			1000 Hz			-136.0		
			10 KHz			-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 2002 Cond. B JESD22-B104 Cond. B, 1500G, half-sign, 0.5ms, each axis for 3 times						
Vibration Test		MIL-STD-883 2007 Cond. A JESD22-B103 Cond. 1, 10~2000Hz, 1.52mm, 20G, each axis for 4 hours						
Thermal Shock		MIL-STD-883 1010 Cond. B JESD22-A104 Cond. B, -55°C, 125°C; soak time is 10 mins, with total 200 cycles						