Features and Benefits

Better than +/- 250 ppb from -40℃ to +85℃
20MHz low noise HCMOS output
3.3V supply ; 3.5 mA typical

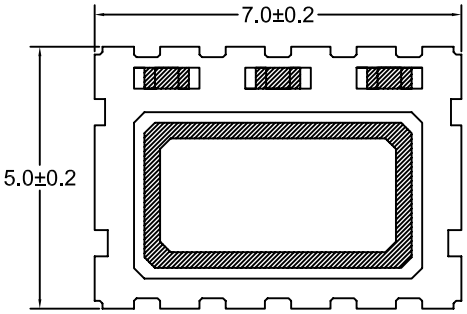
TypicalApplications

Mobile SATCOM
Mobile Radio
Harsh Environments
Femto-cell

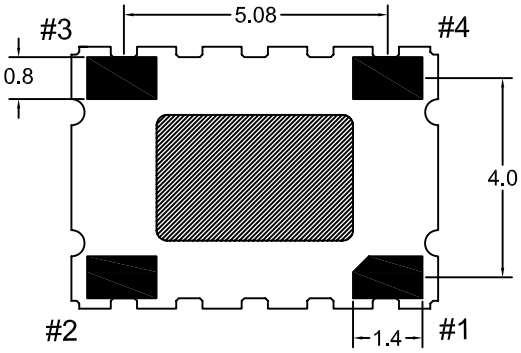
Mechanical Drawing & Pin Connections

DrawingNo: MD13009

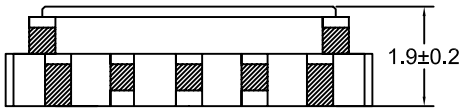
[TOP VIEW]



[BOTTOM VIEW]



[SIDE VIEW]



Pin	Function
1	Vcon VC-TCXO GND TCXO
2	GND
3	OUTPUT
4	VDD

Specifications

TCXO Specification		Sym	Condition	Value			Unit	Note
				Min.	Typ.	Max.		
Operational Frequency Range		f_0			20.000000		MHz	
HCMOS			Load			15	pF	
			Logic 1 level	0.9Vcc			V	
			Logic 0 level			0.1Vcc	V	
			Duty Cycle	45	50	55	%	
Power Supply								
Voltage		V_{CC}		2.970	3.300	3.630	V	
Current Consumption					3.5	6.0	mA	
Frequency versus Voltage								
Pin 1: Voltage Control: 1.5V +/- 1.0V				+/- 5.0			ppm	
Pin 1: Input Impedance				100			K ohm	
Frequency Stability								
Vs. Temperature		-40°C to +85°C (wrt. 25°C reading)				+/-0.250	ppm	
Vs. at 25°C		Initial Accuracy at time of shipment				+/-1.000	ppm	
Vs. Reflow Shift		After 24 hours settling time				+/-1.000	ppm	
Aging								
		After 30 Days of Operation				+/- 1.0	ppm	
SSB Phase Noise								
@ 20MHz		100 Hz			-120	-115	dBc/Hz	
		1 KHz			-140	-135		
		10 KHz			-153	-148		
		100 KHz			-155	-150		
Environmental Conditions								
Vibration Test		MIL-STD-883 2007 Condition A JESD22-B103 Condition 1	10~2000Hz, 1.52mm, 20g, each axis for 4 hrs					
Thermal Shock		MIL-STD-883 1010 Condition B JESD22-A104 Condition B	-55℃, 125℃; soak time is 10 mins, with total 200 cycles					
Mechanical Shock		MIL-STD-883 2002 Condition B JESD22-B104 Condition B	1500G, half-sine, 0.5ms, each axis for 3 times.					
Storage temperature			-55°C to +125°C					