



Features and Benefits

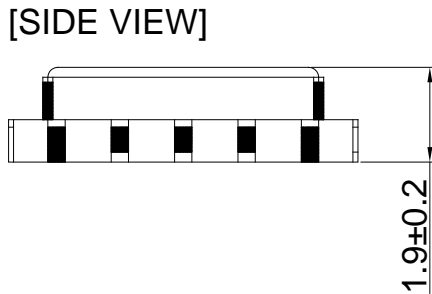
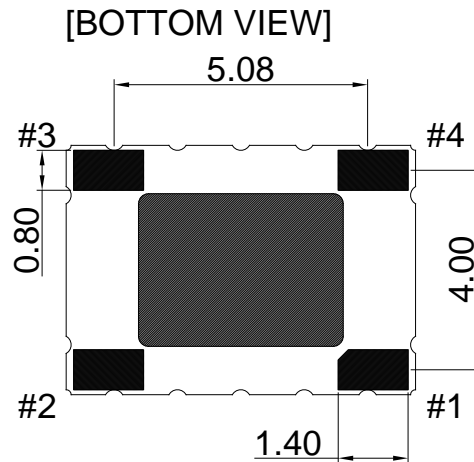
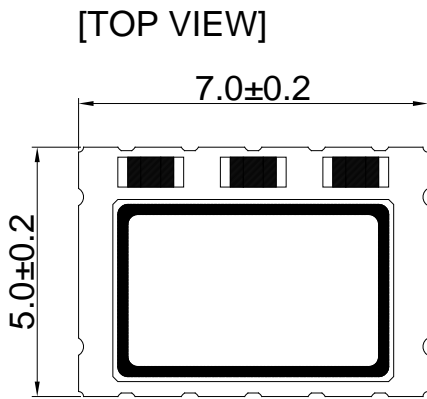
- Better than ± 250 ppb from -40°C to $+85^{\circ}\text{C}$
With respect to $+25^{\circ}\text{C}$ ref. frequency
- Less than ± 1 ppm aging over 20 years
- 28.8MHz low noise clipped sine output
- 5.0V supply; 3.5mA maximum
- ± 5 ppm min. pull with 2.5V ± 2.0 V control

Typical Applications

- Mobile SATCOM
- Mobile Radio
- Harsh Environments
- Femto cell

Mechanical Drawing & Pin Connections

Drawing No:MD13023



Unit:mm
1mm=0.0394inch

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



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Frequency Range	f ₀			28.8		MHz	
RF Output							
Output Wave Form			Clipped Sine wave				
Load Capacitance				10		pF	
Load Resistance				10		Kohm	
Duty Cycle			45		55	%	
Output Level			0.8			Vpk-pk	
Start-up Time					2.0	msec	
Power Supply							
Voltage	V _{cc}		4.75	5.00	5.25	V	
Current Consumption					3.5	mA	
Frequency Control							
Frequency vs. Voltage			±5			ppm	
Control Voltage Pin 1			0.5	2.5	4.5	V	
Frequency Stability							
VS. Temperature		-40°C to +85°C			±250	ppb	With respect to 25°C Ref frequency
VS at 25°C		Initial accuracy at time of shipment			±500	ppb	
VS.Reflow Shift		After 24 hours settling time			±500	ppb	
Aging		After 30 days of operation			±1.00	ppm	Over 20 years
Phase Noise							
@ 28.8 MHz		100Hz			-112	dBc/Hz	
		1 KHz			-135		
		10 KHz			-148		
		100 KHz			-152		
Environmental Conditions							
Parameter	Reference Std.						
Operating temperature range	-40°C to +85°C						