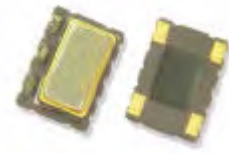


Features

Typical 7.0x5.0x1.9 mm ceramic SMD package.
High Precision for -40 °C to +85 °C, +/-0.2ppm
CMOS and Clipped Sine wave(without DC-cut capacitor) output optional

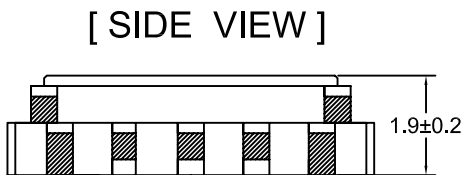
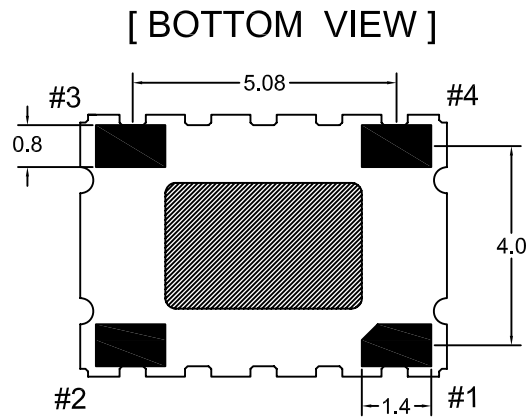
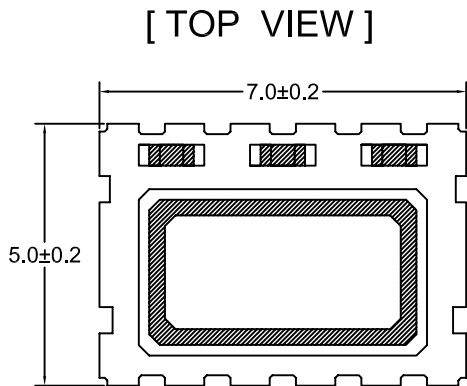
Picture



Typical Applications

Femtocell, Base Stations
WLAN/WiMAX/WiFi, Wireless Communications

Physical Dimensions and Pin Connections



PIN	FUNCTION
#1	Vcon VC-TCXO GND TCXO
#2	GND
#3	OUTPUT
#4	VDD

MD13009

Specification

Specification	5.0V		3.3V		Unit
	Min.	Max.	Min.	Max.	
Frequency Range	5	40	5	40	MHz
Standard Frequency	10,12.8,16.384,19.2,19.44,20,25,26				
Frequency Stability					
Vs Supply Voltage(+/-5%) Change(CMOS)		+/-0.1		+/-0.05	ppm
Vs Load(+/-10%) Change		+/-0.05		+/-0.05	
Vs Aging(@1 st year)		+/-1.0		+/-1.0	ppm/year
Frequency Tolerance*		+/-2.0		+/-2.0	ppm
RF Output					
Output Level(CMOS):					V
Output High(Logic "1")	90%VDD		90%VDD		
Output Low(Logic "0")		10%VDD		10%VDD	
Duty	45	55	45	55	%
Load	15pF		15pF		
Output Level(Clipped Sine Wave)	0.8		0.8		Vp-p
Load	10K//10pF		10K//10pF		
Power Supply					
Supply Voltage Variation(VDD)5%	4.75	5.25	2.97	3.63	V
Supply Current(CMOS Output)		6		6	mA
Supply Current(Clipped Sine Wave Output)		3.5		3.5	mA
Frequency Control					
Control Voltage Range(VCTCXO)	0.5	2.5	0.5	2.5	V
Pulling Range(VCTCXO)	+/-5		+/-5		ppm
Vc Input Impedance(VCTCXO)	100		100		Kohm
Phase Noise@12.8MHz(Typ.)					
100Hz		-130			DBc/Hz
1KHz		-145			
10KHz		-154			
Star Time		2		2	mSec
Storage Temp. Range	-55	125	-55	125	°C

*Frequency at 25C, 1hour after 2times reflow

Specification

Frequency STABILITY VS. TEMPERATURE RANGE:

Temp.(°C)	+/-0.05ppm	+/-0.1ppm	+/-0.14ppm	+/-0.2ppm	+/-0.28ppm
0 To +55	○	○	○	○	○
-10 To +60	○	○	○	○	○
-10 To +70	△	○	○	○	○
-40 To +85	X	X	X	○	○

*○:Available; △:Conditional; X:Not available