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Features and Benefits

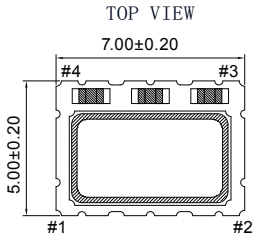
Typical 7.0 x 5.0 x 1.9 mm ceramic SMD package
High Precision and High Temperature for -40ºC ~ +95ºC, ±0.1ppm, -40ºC ~ +105ºC , ±0.2ppm.
CMOS and Clipped Sine wave (without DC-cut capacitor) output optional.

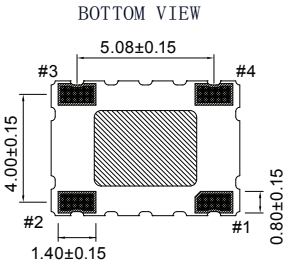
Typical Applications

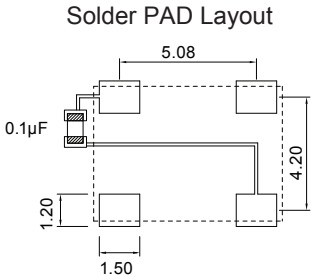
Femtocell, Base Stations
WLAN / WiMAX / WiFi, Wireless Communications

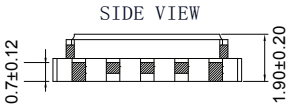
Mechanical Drawing & Pin Connections

Drawing No: **MD160036-1**









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

To ensure optimal oscillator performance, place a by-pass capacitor of 0.1µF as close to the part as possible between Vdd and GND pads.

Unit in mm
1mm = 0.0394 inches

Specifications

Specification	Conditon	3.3V		2.5V		Unit
		Min.	Max.	Min.	Max.	
Supply Voltage Variation(VDD)		V_{DD}-5%	V_{DD}+5%	V_{DD}-5%	V_{DD}+5%	V
Frequency Range		10	52	10	52	MHz
Standard Frequency		10,19.2,20				MHz
Frequency Tolerance			±1.5		±1.5	ppm
Frequency Stability						
Vs Supply Voltage	±5% Change		±0.1		±0.05	ppm
Vs Load	±10% Change		±0.05		±0.05	ppm
Vs Aging	1st year		±1.0		±1.0	ppm
Supply Current	CMOS	-	7.5	-	7	mA
	Clipped Sinewave	-	5.0	-	4.5	
Output Level(CMOS)	Output High	90%VDD	-	90%VDD	-	V
	Output Low	-	10%VDD	-	10%VDD	
	Duty	45	55	45	55	%
Output Level(Clipped Sinewave)		0.8		0.8		Vp-p
Load(CMOS)		15		15		pF
Load(Clipped Sinewave)		10kohm//10pf		10kohm//10pf		
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@20MHz						
100Hz		-130		-130		dBc/Hz
1KHz		-148		-148		
10KHz		-156		-156		
Start Time		-	2	-	2	mSec
Storage Temperature		-55	-125	-55	-125	℃

Frequency Stability vs. Temperature

	±0.05PPM	±0.1PPM	±0.2PPM	±0.28PPM	±0.5PPM	±2PPM
-40°C to +85°C	Conditional	Available	Available	Available	Available	Available
-40°C to +95°C	Conditional	Conditional	Available	Available	Available	Available
-40°C to +105°C	Not Available	Conditional	Available	Available	Available	Available

Note: not all combination of options are available. Other specifications may be available upon request.