



Features and Benefits

- Sine wave output
- Phase noise :
 - 100Hz offset ; better than -132dBc/Hz
 - 1KHz offset : better than -150dBc/Hz
 - 10KHz offset : better than -158dBc/Hz
- Operating temperature: -20°C to +70°C

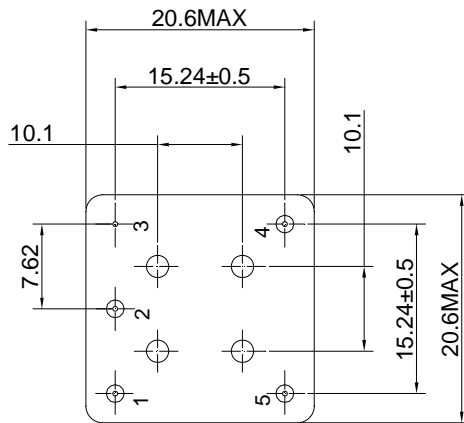
Typical Applications

- Cellular Base Stations
- Instrumentation
- Microwave Application
- Stratum 3E clock systems

Mechanical Drawing & Pin Connections

Drawing No: MD160032-1

Bottom View

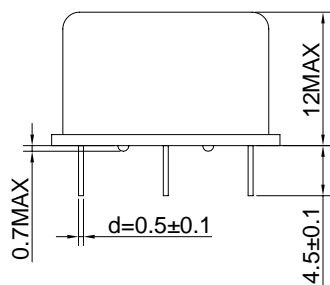


Pin Connections:

Pin	Function
1	Power Supply
2	Output
3	GND
4	No Connect
5	REF. Voltage

Unit:mm
1mm=0.0394inch

Side View





Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Nominal Frequency	F _{nom}			40.000000		MHz	
Initial Accuracy		@+25 +/-5°C,			+/-200	ppb	
RF Output							
Waveform			Sine Wave				
Load				50		Ohm	
Output Voltage Level				8.0	10	dBm	
Harmonics Suppression				-40		dBc	
Spurious Responses				-70		dBc	
Power Supply							
Supply Voltage	V _{cc}		+4.75	+5	+5.25	V	
Power Consumption		Warm-up			2.5	W	
		Steady state			1.0	W	
Warm-up Time		Frequency within +/-100ppb			300	s	
Reference Voltage Output			Pin5 No connect				
Frequency Stability							
Vs. Temperature		-20°C to +70°C ref. +25°C			+/-20	ppb	
Frequency Retrace Characteristics				+/-10		ppb	
Short Term Stability		After 1hour		+/-0.05		ppb/s	
Aging(After 30days Operation)		Per day			+/-1.0	ppb	
		Per year			+/-300	ppb	
		10 years			+/-1.5	ppm	
SSB Phase Noise (typ.)		1 Hz		-85		dBc/Hz	
		10 Hz		-113			
		100 Hz		-132			
		1 KHz		-150			
		10 KHz		-158			
		100 KHz		-165			
Environmental Conditions-165							
Parameter	Reference Std.		Test Condition				
Operating temperature range	-20°C to +70°C						
Storage temperature range	-50°C to +105°C						
Hand Soldering Conditions	3s MAX AT +350°C						