



### Features and Benefits

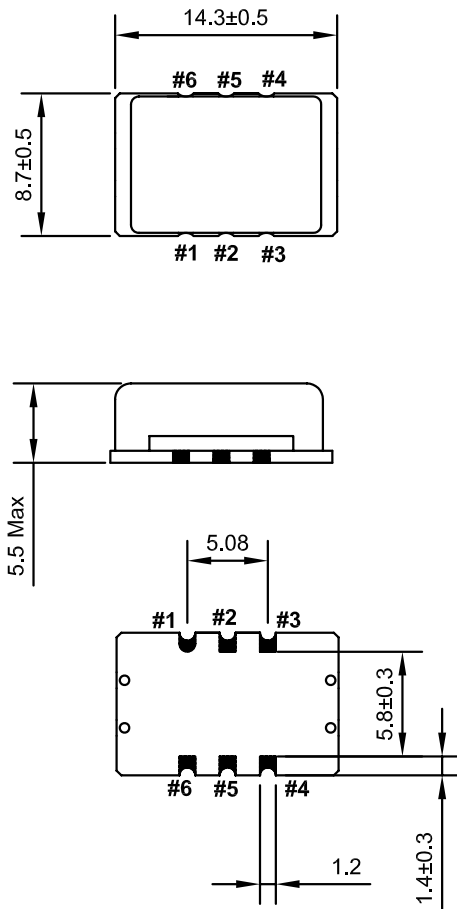
- 41MHz Frequency
- 5V Supply voltage
- Sinewave Output waveform
- ±0.5ppm Temperature Stability
- 14.3x8.7x5.5mm Size

### Typical Applications

- Cellular Base Stations
- Instrumentation
- Microwave Applications
- Stratum 3E clock systems
- Radar reference

### Mechanical Drawing & Pin Connections

Drawing No: MD190016-1



#### Pin Connections:

- #1. Control Voltage
- #2. N.C.
- #3. GND
- #4. RF Output
- #5. N.C.
- #6. Supply Voltage

unit in mm  
1mm = 0.0394 inches



## Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Frequency	F <sub>nom</sub>			41		MHz	
<b>RF Output</b>							
Signal Waveform			Sinewave				
Load	R <sub>L</sub>		50			ohm	
Output power			+10			dBm	
<b>Power Supply</b>							
Supply Voltage	V <sub>cc</sub>		4.75	5	5.25	V	
Power Consumption			12		30	mA	
<b>Frequency Adjustment Range</b>							
Electronic Frequency Control (EFC)			±5			ppm	
EFC voltage	V <sub>c</sub>		0.5	2.5	4.5	V	
EFC Slope			positive				
EFC Input Impedance			100			k Ω	
<b>Frequency Stability</b>							
Versus Operating Temperature Range		0°C to 50°C		±0.5		ppm	
Versus supply voltage		±5% change		±0.1	±0.3	ppm	
Versus load		±10% change			±0.2	ppm	
Aging 1 <sup>st</sup> Year		@+40°C			±1	ppm	
<b>Absolute Maximum Ratings</b>							
Supply Voltage V <sub>s</sub>		V <sub>s</sub> to GND	-0.5		V <sub>s</sub> +10%	V	
Control Voltage V <sub>c</sub>		V <sub>c</sub> to GND	-0.5		6	V	
<b>Environmental, Mechanical Conditions</b>							
Weight	2g						
Size	14.8x9.2x5.5 max. (mm)						
Operation temperature range	0°C to 50°C						
Storage temperature range	-55°C to 105°C						

## Environmental Conditions

Test	IEC 60068 Part...	IEC 60679-1 Clause	MIL-STD-202G Method	MIL-STD-810F Method	MIL-PRF-55310D Clause	Test conditions (IEC)
Sealing tests (if applicable)	2-17	5.6.2	112E		3.6.1.2	Gross leak: Test Qc Fine leak: Test Qk
Solderability	2-20	5.6.3	208H		3.6.52	Test Ta method 1
Resistance to soldering heat	2-58		210F		3.6.48	Test Td <sub>1</sub> method 2 Test Td <sub>2</sub> method 2
Shock	2-27	5.6.8	213B	516.4	3.6.40	Test Ea, 3 x per axis 100 g 6 ms half-sine pulse
Vibration sinusoidal	2-6	5.6.7.1	201A 204D	516.4-4	3.6.38.1 3.6.38.2	Test Fc, 30 min per axis, 1 oct / min 10 Hz – 55 Hz 0, 75 mm; 55 Hz – 2 kHz 10g
Vibration random	2-64	5.6.7.3	214A	514.5	3.6.38.3 3.6.38.4	Test Fdb
Endurance tests			108A			
- Aging		5.7.1			4.8.35	30 days @ +85°C, OCXO @ +25°C
- Extended aging		5.7.2				1000 h, 2000 h, 8000 h @ +85°C