



### Features and Benefits

- Two +12dBm sine outputs
- Compact 9 x 14 mm package
- Low Noise: Less than -140 dBc/Hz @ 1KHz
- 3.3V supply; Less than 25 mA current consumption.
- Less than ±0.28 ppm stability

### Typical Applications

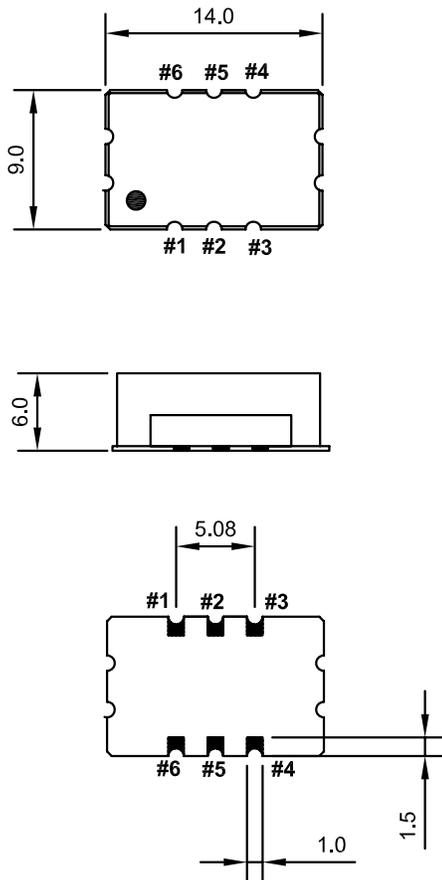
Clock Reference Module able to serve multiple RF IC's such as Transceiver and A/D functions

### Description

Core Clock TCXO function combined with value-added circuitry to create two separate outputs

### Mechanical Drawing & Pin Connections

Drawing No: MD150098-4



Solder pattern

#### Pin Connections:

- #1. N.C.
- #2. N.C.
- #3. GND
- #4. RF Output (1)
- #5. RF Output (1 inverse)
- #6. Vcc

Unit in mm  
1mm = 0.0394 inches



## Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency Range	F <sub>nom</sub>			20.0000		MHz	
Output Waveform		>12dBm		Sine wave			
Output Load				50		Ω	
Start-up time				<5		ms	
<b>Power Supply</b>							
Supply Voltage	V <sub>dc</sub>			+3.3		V	
Current Consumption				<25		mA	
<b>Frequency Stability</b>							
Versus Temperature Reference to (F <sub>MAX</sub> +F <sub>MIN</sub> ) / 2		Over -40°C to +85°C		<±0.28		ppm	
Tolerance ex factory		@ +25° C		≤±1.00		ppm	
Versus Supply Voltage Change Reference to frequency at nominal supply				≤±0.05		ppm	±5%
Versus Load Changes Reference to frequency at nominal load				≤±0.05		ppm	±10%
Versus Aging after 10 days of operation		1 <sup>st</sup> year		≤±0.80		ppm	
Phase Noise@20 MHz carrier frequency		1 kHz		<-140		dBc/Hz	
		10kHz		<-145			
<b>Environmental Conditions</b>							
Operating temperature range	-40°C to +85°C						
Storage temperature range	-55°C to +125°C						
Reflow Profiles	Per IPC/JEDEC J-STD-020C ≤245°C over 10 sec. Max.						
Moisture Sensitivity	Level 1 (unlimited)						