



Features and Benefits

Two +9dBm 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

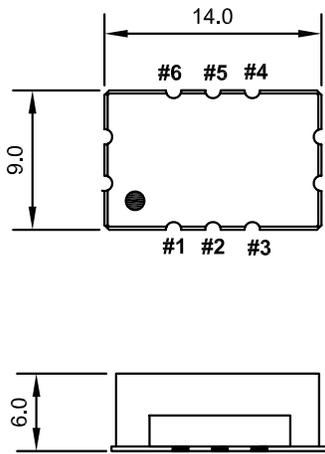
Clock Reference Module able to serve multiple RF IC's such as Transceiver and A/D functions

Description

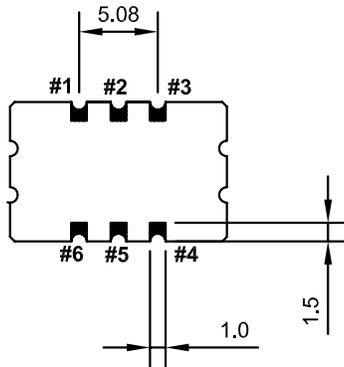
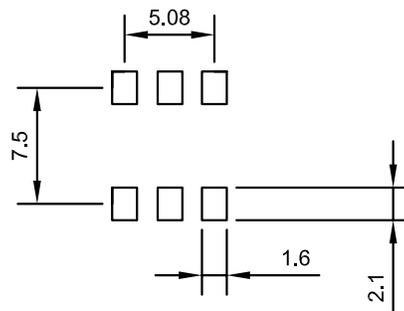
Core Clock TCXO function combined with value-added circuitry to create two separate outputs

Mechanical Drawing & Pin Connections

Drawing No: MD150098-4



Solder pattern



Pin Connections:

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

Note: Pads 4 and 5 sine wave outputs are IN PHASE and the same frequency

Unit in mm
1mm = 0.0394 inches



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency Range	F _{nom}			20.0000		MHz	
Output Waveform			Sine wave				
Output Level				+9		dBm	
Output Load				50		Ω	
Start-up time					5	ms	
Power Supply							
Supply Voltage	V _{dc}			+3.3		V	
Current Consumption					25	mA	
Frequency Stability							
Versus Temperature Reference to (F _{MAX} +F _{MIN}) / 2		From -40°C to +85°C			±0.28	ppm	
Tolerance ex factory		@ +25° C			±1.0	ppm	
Versus Supply Voltage Change Reference to frequency at nominal supply		±5%			±0.05	ppm	
Versus Load Changes Reference to frequency at nominal load		±10%			±0.05	ppm	
Versus Aging after 10 days of operation		1 st year			±0.8	ppm	
Phase Noise@20 MHz carrier frequency		1 kHz			-140	dBc/Hz	
		10kHz			-145		
Environmental Conditions							
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)						