



Features and Benefits

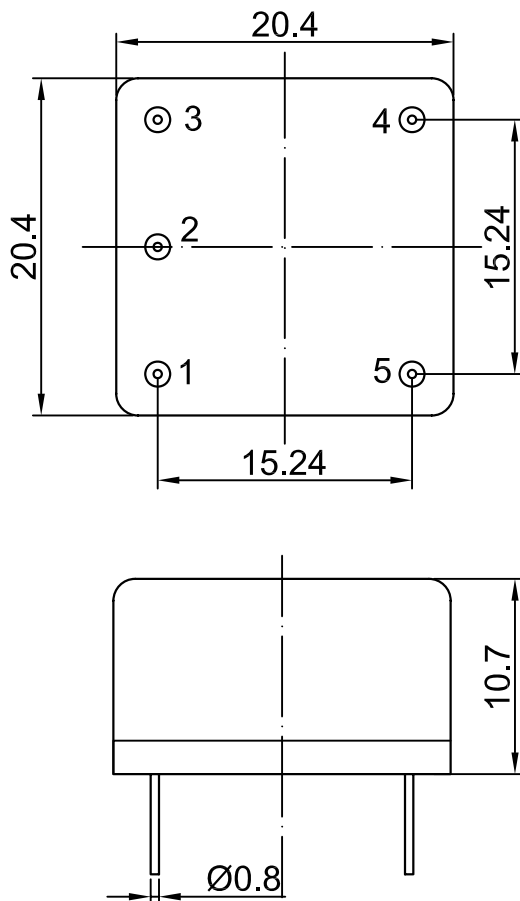
- Sinewave output
- High frequency stability(less than ± 300 ppb over -55°C to $+75^{\circ}\text{C}$)
- 5.0V supply voltage

Typical Applications

- Microwave communication systems
- Portable and mobile devices
- Instrument and clock reference

Mechanical Drawing & Pin Connections

Drawing No: MD140082-3



Pin Function

Pin	Function
1	Control Voltage
2	N.C. or Vref
3	GND
4	Output
5	Supply Voltage

Unti in mm
1mm = 0.0394 inches



Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	f_0			38.4		MHz	
RF Output							
Sine-wave	Level	L	6	8	10	dBm	
	Load	R_L		50		Ohm	
	Harmonics Level				-30	dBc	
Power Supply							
Supply Voltage	V_{cc}		4.75	5.00	5.25	V	
Power Consumption		Warm-up			900	mA	
		Steady-state, +25°C			200		
Frequency Control							
Control Voltage Range	V_c		0	2.0	4.0	V	
Tuning Range			-1		+1	ppm	
Frequency Stability							
Vs. Temperature		ref 25°C From -55°C to +75°C		±300		ppb	
Vs. Supply Voltage		Ref V_{cc} typ.			±10	ppb	
Vs. Load Change					±10	ppb	
Aging	Per day	After 30 days of operation			±5.0	ppb	
	First Year				±300	ppb	
Phase Noise		10 Hz			-95	dBc/Hz	
		100 Hz			-120		
		1 KHz			-150		
		10 KHz			-155		
Environmental Conditions							
Operating temperature range		-55°C to +75°C					
Storage temperature range		-55°C to +100 °C					
Mechanical Shock		Per IEC 68-2-27 Test Ea, 30G, sinewave, 11ms, 3 axis					
Vibration		Per IEC 68-2-06 Test Fc, 10G, swept sine 10 to 2000Hz, amplitude 0.75mm, 30 minutes one cycle, 1hour for each axis.					
Drop		Free fall from 100cm height to concrete or steel surfaces					