



Features and Benefits

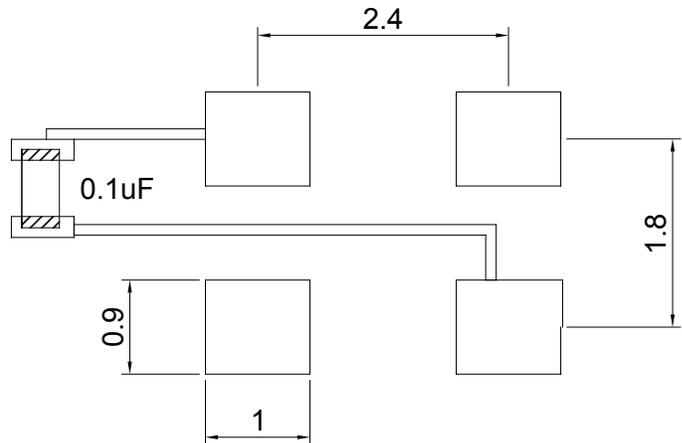
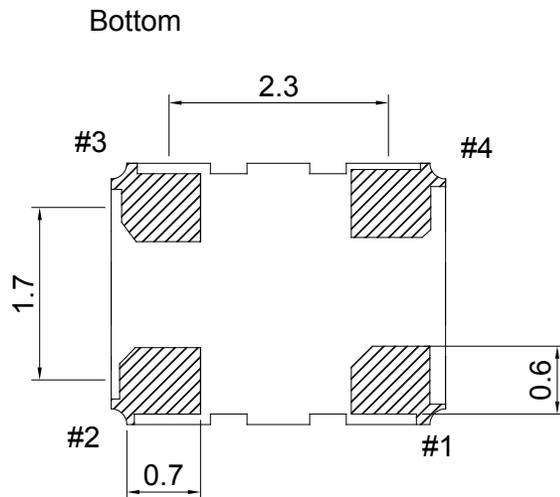
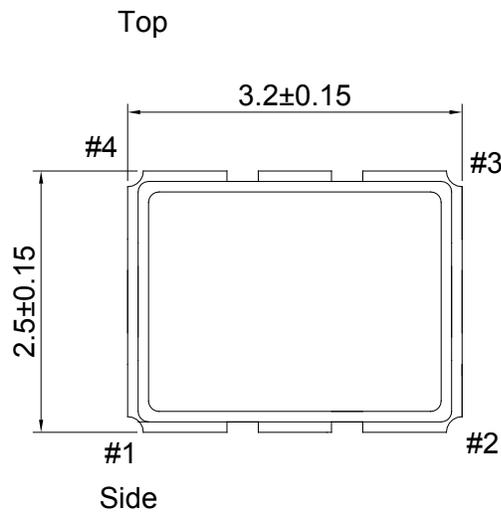
Better than ±2.0 ppm stability from -40°C to +85°C
 3.IV supply; 2.5mA maximum
 Less than -152dBc/Hz @ 100 KHz offset

Typical Applications

Mobile Radio
 Communication Equipment

Mechanical Drawing & Pin Connections

Drawing No:MD160011-1



Pin	Funtion
Pin 1	GND/NC
Pin 2	GND
Pin 3	OUTPUT
Pin 4	VDD

Unit : mm
 1mm=0.0394inch

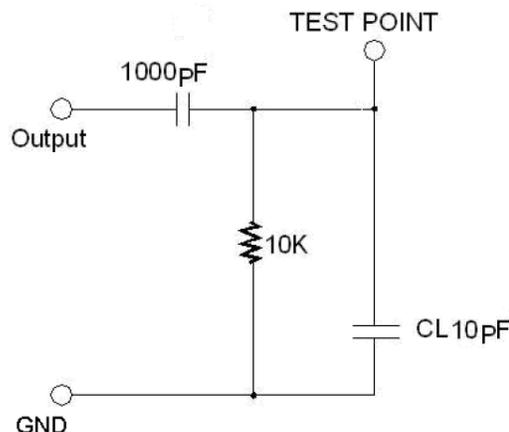
Recommended soldering pattern



Specifications

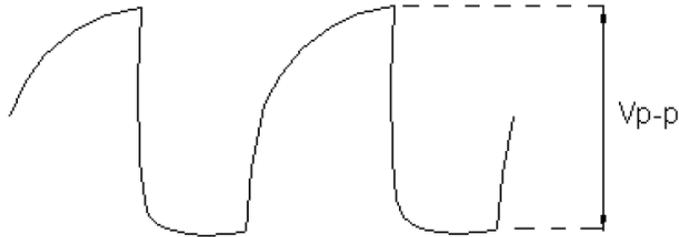
Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Frequency Range	F ₀			32.00		MHz	
RF Output							
Output Wave Form		DC coupled clipped sine wave	Clipped Sine wave				
Output Load			10 Kohm//10pF				
Output Voltage Level			0.8		2	Vp-p	
Start Time					2	ms	
Power Supply							
Voltage	V _{cc}		3.135	3.3	3.465	V	
Input Current		At maximum supply voltage			2.5	mA	
Frequency Stability							
VS. Tolerance		@25°C, 1 hour after 2 times reflow	-2.0		+2.0	ppm	
VS. Temperature		Referenced to the frequency at 25°C	-1.5		+1.5	ppm	
VS. ±5% change in supply voltage		At 25°C	-0.2		+0.2	ppm	
VS. ±10% change in load			-0.2		+0.2	ppm	
Aging		first year at 25°C	-1.0		+1.0	ppm	
Phase Noise							
Phase noise		10Hz		-85		dBc/Hz	At 25°C
		100 Hz		-112			
		1 KHz		-133			
		10 KHz		-149			
		100 KHz		-152			
Environmental Conditions							
Parameter	Reference Std.		Test Condition				
Operating temperature range	-40°C to +85°C						
Storage temperature range	-40°C to +85°C						
Vibration Test	MIL-STD-883 2007 Condition A JESD22-B103 Condition 1		10-2000 Hz, 1.52mm, 20g, each axis for 4 hours				
Thermal Shock	MIL-STD-883 1010 Condition B JESD22-A104 Condition B		-55°C, +125°C, soak time is 10 mins, with total 200 cycles				
Mechanical Shock	MIL-STD-883 2002 Condition B JESD22-B104 Condition B		1500G, half-sine, 0.5ms, each axis for 3 times				

Test Circuit



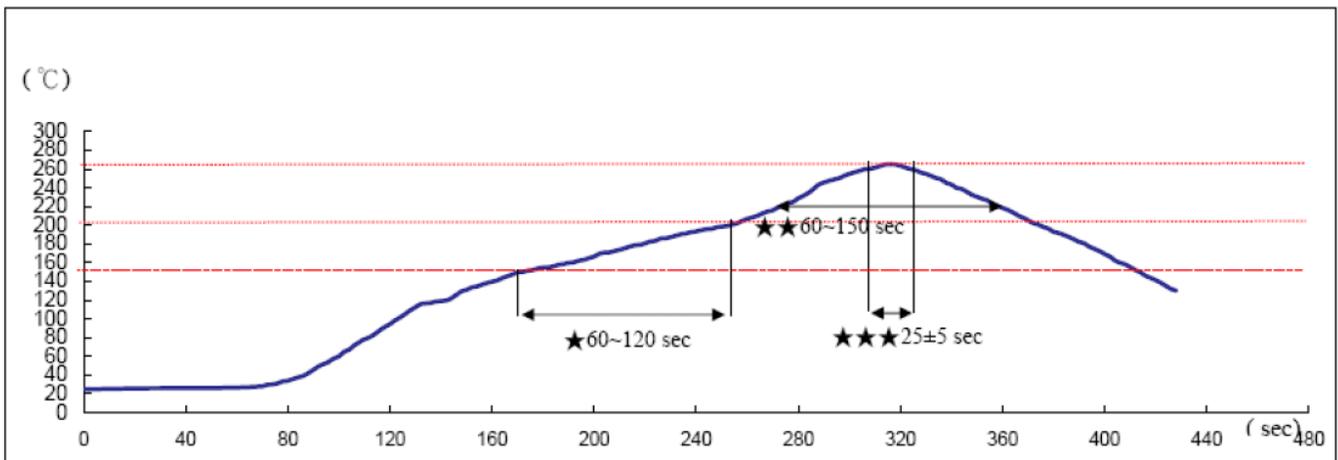


Output Waveform



RECOMMENDED IR REFLOW PROFILE

- IR REFLOW PROFILE OF CERAMIC SMD PRODUCTS FOR Pb FREE PROCESS



Reference Standard: JEDEC-STD 020

Test Conditions: * Pre-heating: 150°C to 200°C, 60~120 secs

**Heating: 217°C, 60~150 secs

***Peak Temperature: 260±5°C, 25±5 sec