

M4005, M4006 & M4007 Series 3.3 V, 5.0 V or 12.0 V, Sine Wave, SAW Oscillator



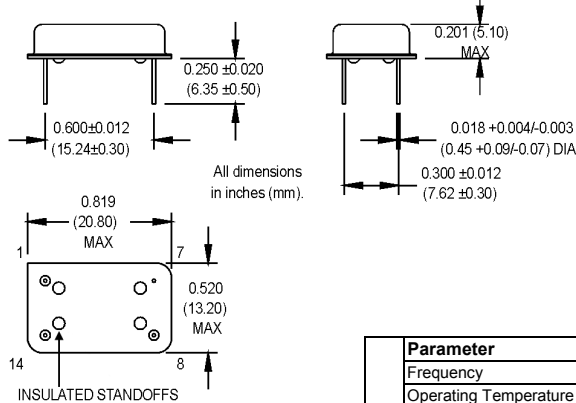
Ordering Information

	M4005	4	2	T	D	00.0000 MHz
Product Series						
M4005 = 3.3 V						
M4006 = 5.0 V						
M4007 = 12.0 V						
Temperature Range						
2: -40 °C to +85 °C 3: -55 °C to +105 °C						
4: -55 °C to +125 °C						
Stability						
A: ±250 ppm 2: ±500 ppm						
Output Waveform						
T: Sine Wave						
Package/Lead Configurations						
D: Dual In-Line Package; Nickel Header (Through Hole)						
K: FR-4; 4 Pin (Surface Mount)						
Frequency (customer specified)						

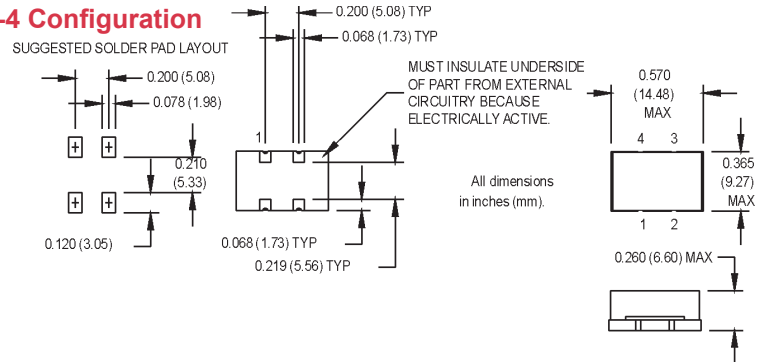
M4005Sxxx, M4006Sxxx & M4007Sxxx - Custom datasheets.

- Low Jitter: < 0.2 ps from 12 kHz to 20 MHz
- Ideal for clock smoothing application for OC-48 and OC-192

DIP14 Configuration



FR-4 Configuration



Pin Connections

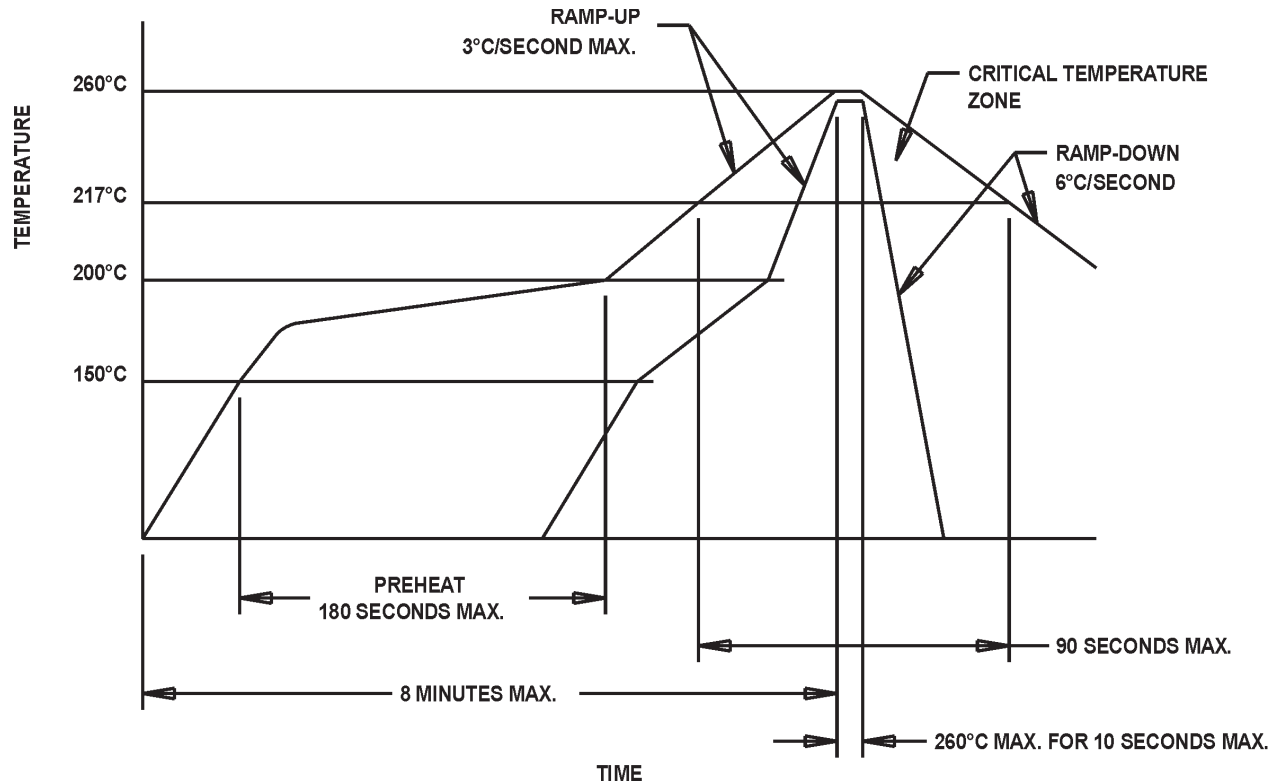
PIN	FUNCTION
1	N/C
2	GND
3	RF Output
4	+V _{DD}

Electrical Specifications	Parameter	Symbol	Min.	Typ.	Max.	Units	Conditions/Notes
	Frequency	F _O		1090		MHz	Contact factory for other frequency options.
	Operating Temperature	T _A	(See Ordering Information)			°C	
	Storage Temperature	T _{STG}	-55		+125	°C	
	Frequency Stabilities						
	Stability vs Temperature	ΔF _T /F	(See Ordering Information)			ppm	
	Supply Voltage & Current						
	Supply Voltage	V _{DD}	11.4	12.0	12.6	V	(See Ordering Information)
			4.75	5.0	5.25	V	(See Ordering Information)
			3.135	3.3	3.465	V	(See Ordering Information)
Supply Current	I _{DD}		30	40	mA		
RF Output							
Output Load				50	Ω		
Output Type	Sine Wave						
Output Power		10	12	14	dBm		
Other Parameters							
Startup Time			2	10	ms		
G-sensitivity			0.9		ppb/g		
2nd Harmonic				-35	dBc		
Phase Jitter	Φ _J		0.18 0.12	0.20 0.15	ps RMS ps RMS	12 kHz to 80 MHz 50 kHz to 80 MHz	
Phase Noise (Typical @ 1090 MHz)			-110 -138 -150 -160		dBc/Hz dBc/Hz dBc/Hz dBc/Hz	@ 1 kHz Offset @ 10 kHz Offset @ 100 kHz Offset @ 1 MHz Offset	
Environmental	Shock	MIL-STD-202, Method 213, Condition C (100 g)					
	Vibration	MIL-STD-202, Methods 201 & 204 (10 g from 10 Hz to 2000 Hz)					
	Solderability	EIAJ-STD-002					
	Package	9.0 mm x 14.0 mm, SMT and DIP (RoHS Compliant)					
	Max Soldering Conditions	See solder profile					

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Please see www.mtronpti.com for our complete offering and detailed datasheets. Contact us for your application specific requirements: MtronPTI 1-800-762-8800.

MtronPTI Lead Free Solder Profile



*Note: Lead free solder profile applies to FR-4 configuration only.
DIP14 configuration maximum wave solder condition is +260 °C for 10 seconds.*