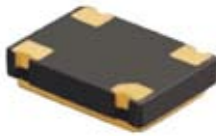
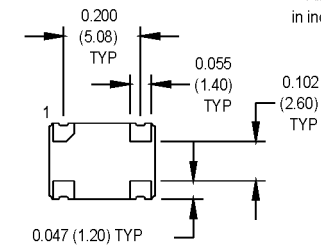
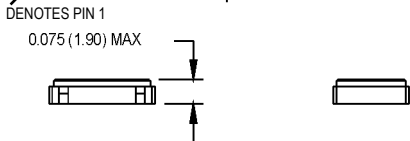
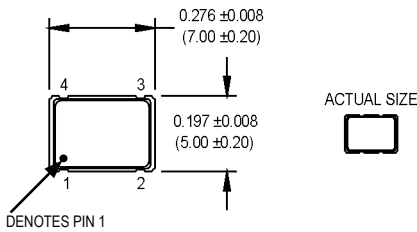


# M2250 Series

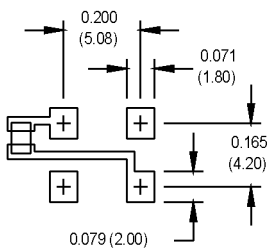
5x7 mm, 2.5 Volt, HCMOS/TTL, Clock Oscillator



- 2.5 Volt Operation
- Standby Option
- High density boards, low power circuits, portable test sets



SUGGESTED SOLDER PAD LAYOUT



**NOTE:** A capacitor of value 0.01  $\mu$ F or greater between Vdd and Ground is recommended.

### Ordering Information

**M2250 1 3 T C N 00.0000 MHz**

**Product Series** M2250

**Temperature Range**  
 1: 0°C to +70°C      2: -40°C to +85°C  
 6: -20°C to +70°C

**Stability**  
 3:  $\pm 100$  ppm      4:  $\pm 50$  ppm  
 5:  $\pm 35$  ppm      6:  $\pm 25$  ppm

**Output Type**  
 F: Fixed      Q: Standby Function  
 T: Tristate

**Symmetry/Logic Compatibility**  
 A: 40/60 TTL/HCMOS  
 C: 45/55 HCMOS

**Package/Lead Configurations**  
 N: Leadless

**Frequency (customer specified)** 00.0000 MHz

### Pin Connections

PIN	FUNCTION
1	N/C, Tri-state or Standby
2	Ground
3	Output
4	+Vdd

	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition
Electrical Specifications	Frequency Range	F	1.0		125	MHz	See Note 1
	Frequency Stability	$\Delta F/F$	(See Ordering Information)				
	Operating Temperature	T <sub>A</sub>	(See Ordering Information)				
	Storage Temperature	T <sub>s</sub>	-55		+125	°C	
	Input Voltage	V <sub>dd</sub>	2.375	2.5	2.625	V	
	Input Current	I <sub>dd</sub>			30	mA	
	Standby Current				10	$\mu$ A	Standby Mode
	Symmetry (Duty Cycle)		(See Ordering Information)				
	Load				15/10	pF/TTL	
	Rise/Fall Time	T <sub>r</sub> /T <sub>f</sub>			6	ns	Ref. 0.25 - 2.25 V
	Logic "1" Level	V <sub>oh</sub>	90% V <sub>dd</sub>			V	HCMOS Load
	Logic "0" Level	V <sub>ol</sub>			10% V <sub>dd</sub>	V	HCMOS Load
	Cycle to Cycle Jitter			8	15	ps RMS	1 Sigma
	Standby/Tristate Function		Input Logic "1" or floating; output active Input Logic "0"; output to high-Z				
Environmental	Mechanical Shock	Per MIL-STD-202, Method 2 13, Condition C					
	Vibration	Per MIL-STD-202, Method 201 & 204					
	Hermeticity	Per MIL-STD-202, Method 112 (1 x 10 <sup>-6</sup> at m.cc/s of helium)					
	Solderability	Per EIAJ-STD-002					

1. Not all frequencies are available. Please contact factory for availability.

# MtronPTI Lead Free Solder Profile

