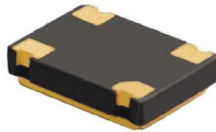
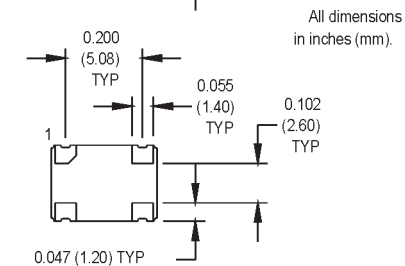
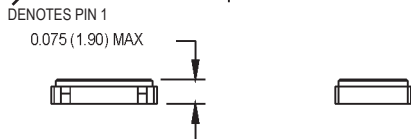
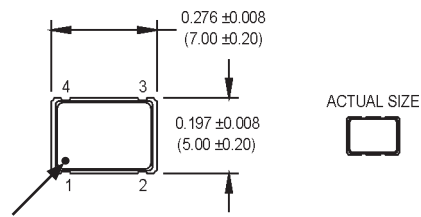


M2250 Series

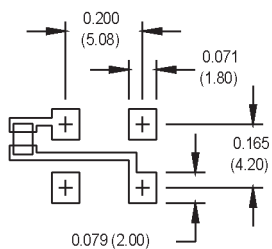
5x7 mm, 2.5 Volt, HCMOS/TTL, Clock Oscillator



- 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 μ F or greater between Vdd and Ground is recommended.

Ordering Information

Product Series	M2250	1	3	T	C	N	00.0000 MHz
Temperature Range	1: 0°C to +70°C	2: -40°C to +85°C					
Stability	3: ±100 ppm	4: ±50 ppm	*8: ±20 ppm				
Output Type	F: Fixed	T: Tristate	Q: Standby Function				
Symmetry/Logic Compatibility	A: 40/60 TTL/HCMOS	C: 45/55 HCMOS					
Package/Lead Configurations	N: Leadless						
Frequency (customer specified)							

* 0°C to +70°C only
M2250Sxxx - Contact factory for datasheet.

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 _A	(See Ordering Information)				
	Storage Temperature	T _s	-55		+125	°C	
	Input Voltage	V _{dd}	2.375	2.5	2.625	V	
	Input Current	I _{dd}			30	mA	
	Standby Current				10	μ A	Standby Mode
	Symmetry (Duty Cycle)		(See Ordering Information)				
	Load				15/10	pF/TTL	
	Rise/Fall Time	T _r /T _f			6	ns	Ref. 0.25 - 2.25 V
	Logic "1" Level	V _{oh}	90% V _{dd}			V	HCMOS Load
	Logic "0" Level	V _{ol}			10% V _{dd}	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 213, Condition C					
	Vibration	Per MIL-STD-202, Method 201 & 204					
	Hermeticity	Per MIL-STD-202, Method 112 (1 x 10 ⁵ atm.cc/s of helium)					
	Solderability	Per EIAJ-STD-002					
	Max Soldering Conditions	See solder profile, Figure 1					

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

TTL Load - see load circuit diagram #1. HCMOS Load - see load circuit diagram #2.

MtronPTI Lead Free Solder Profile

