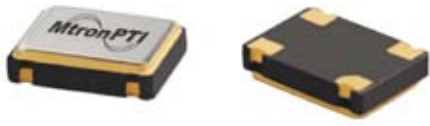


M2180 Series

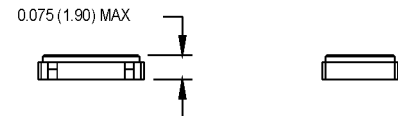
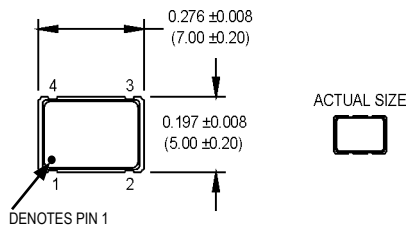
5x7 mm, 1.8 Volt, HCMOS/TTL, Clock Oscillator



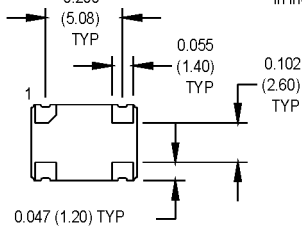
- 1.8 Volt Operation
- Standby Option
- High density boards, low power circuits, portable test sets

Ordering Information

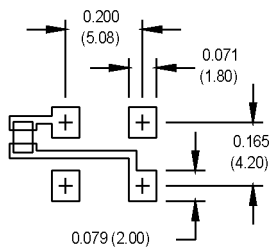
	M2180	1	3	T	C	N	00.0000	MHz
Product Series								
Temperature Range	1: 0°C to +70°C		2: -40°C to +85°C					
Stability	3: ±100 ppm		4: ±50 ppm					
	5: ±35 ppm		6: ±25 ppm					
Output Type	F: Fixed		Q: Standby Function					
	T: Tristate							
Symmetry/Logic Compatibility	A: 40/60 TTL/HCMOS		C: 45/55 HCMOS					
Package/Lead Configurations	N: Leadless							
Frequency (customer specified)								



All dimensions
in inches (mm).



SUGGESTED SOLDER PAD LAYOUT



NOTE: A capacitor of value 0.01 μ F or greater between Vdd and Ground is recommended.

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		70	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}	1.62	1.8	1.98	V	
	Input Current	I _{dd}			20	mA	
	Standby Current				10	μ A	Standby Mode
	Symmetry (Duty Cycle)		(See Ordering Information)				
	Load				30/10	pF/TTL	
	Rise/Fall Time	Tr/Tf			10	ns	Ref. 10% - 90% V _{dd}
					6	ns	Ref. 10% - 90% V _{dd}
	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					
	Reflow Solder Conditions	See "Figure 2" on page 147					
	Hermeticity	Per MIL-STD-202, Method 112 (1 x 10 ⁹ atm.cc/s of helium)					
	Solderability	Per EIAJ-STD-002					

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

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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.