M6005 & M6006 Series
9x14 mm FR-4, 5.0 or 3.3 Volt, HCMOS/TTL, TCXO

- Excellent aging and phase noise
- Ideally suited for fixed wireless radio, LMDS, and GPS applications

Ordering Information

M6005/M6006 1 L F A D 00.0000 MHz

Product Series
M6005 = 3.3 V
M6006 = 5.0 V

Temperature Range
1: 0°C to +70°C **2:** -40°C to +85°C
6: -20°C to +70°C **8:** 0°C to +50°C

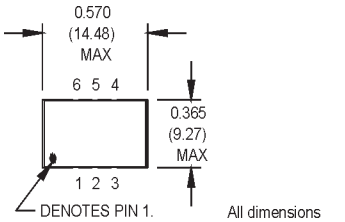
Stability
L: ±5 ppm

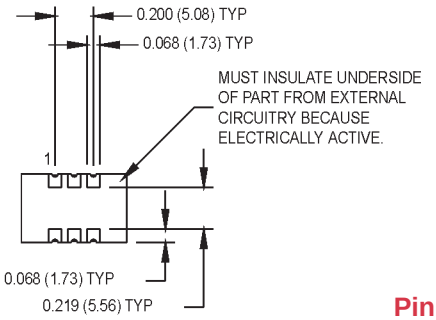
Frequency Control (Pin #1)
F: Fixed

Symmetry/Logic Compatibility
A: 40/60 CMOS/TTL
B: 45/55 TTL
C: 45/55 CMOS

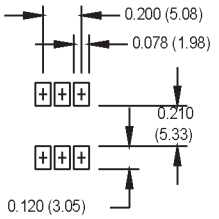
Package/Lead Configurations
D: DIP; Nickel Header **K:** FR-4, 6 Pad

Frequency (customer specified)



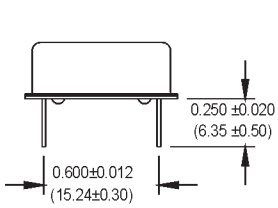


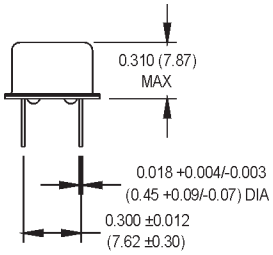
SUGGESTED SOLDER PAD LAYOUT

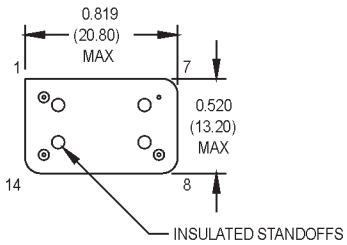


Pin Connections

PIN	FUNCTION
1	N/C
2	Tri-state
3	Ground
4	Output
5	N/C
6	+Vdd







All dimensions
in inches (mm).

Pin Connections

PIN	FUNCTION
1	N/C or Control Voltage
7	Ground/Case
8	Output
14	+Vdd

M-tron Industries, Inc., PO Box 630, Yankton, SD 57078-0630, USA Phone: 605-665-9321 or 1-800-762-8800 Fax: 605-665-1709 Website: www.mtron.com
M-tron Industries Limited, 1104 Shanghai Industrial Investment Building, 48-62 Hennessy Road, Wanchai, Hong Kong, China Phone: 852-2866-8023 Fax: 852-2529-1822

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9x14 mm FR-4, 5.0 or 3.3 Volt, HCMOS/TTL, TCXO

	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition
Electrical Specifications	Frequency Range	F	60		170	MHz	
	Frequency Stability	ΔF/F	(See Ordering Information)				
	Operating Temperature	TA	(See Ordering Information)				
	Storage Temperature	TS	-55		+85	°C	
	Input Voltage	Vdd	3.135 4.75	3.3 5.0	3.465 5.25	VDC VDC	
	Input Current	Idd			15 20	mA	3.3 Volt 5.0 Volt
	Symmetry (Duty Cycle)		(See Ordering Information)				
	Load		5 TTL or 15 pF Max.				
	Rise/Fall Time	Tr/Tf			10	ns	
	Logic "1" Level	Voh	2.4 90			VDC %	TTL Load HCMOS Load
	Logic "0" Level	Vol			10 0.4	VDC %	TTL Load HCMOS Load
	Phase Jitter	ϕ J		TBD		ps RMS	Cycle-to-Cycle
	Aging[1]						
	Modulation Bandwidth	fm	10			kHz	
	Input Impedance (Pin 1)	Zin	100			KΩ	
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^{-8} atm.cc/s of helium)					
	Solderability	Per EIAJ-STD-002					

1. Stability is inclusive of 5 year aging @ 25°C.

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