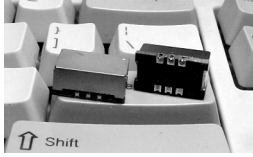
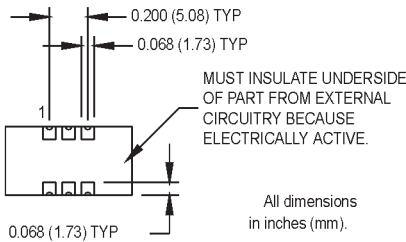
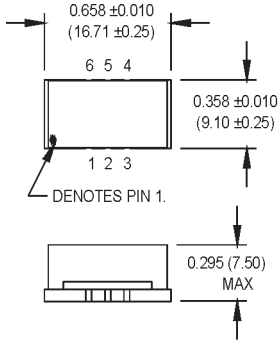


M6007 Series

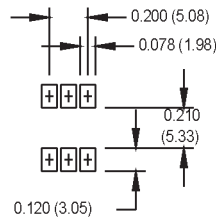
9x14 mm FR-4, 3.3 Volt, HCMOS/TTL, TCVCXO



- Stratum 3 compliant stability and aging
- Ideal for WLL/DWDM/ATM, and SONET/SDH applications



SUGGESTED SOLDER PAD LAYOUT



Pin Connections

FUNCTION	SMT
N/C	1
Tristate	2
Ground/Case	3
Output	4
N/C	5
+Vdd	6

Ordering Information		00.0000 MHz
Product Series	M6007	
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)	V: ±10 ppm	
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)		

M6007Sxxx - Contact factory for datasheet.

	PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition/Notes	
Electrical Specifications	Frequency Range	F	60		170	MHz		
	Operating Temperature	T _A	(See Ordering Information)					
	Storage Temperature	T _S	-55		+105	°C		
	Frequency Stability	ΔF/F	(See Ordering Information)					See Note 1
	Aging							
	1st Year				1.5	ppm		
	Thereafter (per year)				0.5	ppm		
	Pullability/APR		(See Ordering Information)					
	Control Voltage	V _c	0.5	1.5	2.5			
	Tuning Range				10	ppm/V		
	Modulation Bandwidth	f _m	10			kHz		
	Input Impedance	Z _{in}	50k			Ohms		
	Input Voltage	V _{dd}	3.15	3.3	3.45	V		
	Input Current	I _{dd}			25	mA		
	Output Type						CMOS/TTL	
	Load		2 TTL or 15 pF max.					
	Symmetry (Duty Cycle)		(See Ordering Information)					
	Logic "1" Level	V _{oh}	2.5			V		
	Logic "0" Level	V _{ol}			0.5	V		
	Rise/Fall Time	T _r /T _f			10	ns		
Tristate Function		Input Logic "1": output active Input Logic "0": output disables					Opposite tristate logic available upon request.	
Start up Time				10	ms			
Phase Noise (Typical)	10 Hz	100 Hz	1 kHz	10 kHz	100 kHz		Offset from carrier	
	@155.52 MHz	-60	-90	-110	-120	-120	dBc/Hz	
Environmental	Shock	MIL-STD-202, Method 213, C				100 g's		
	Vibration	MIL-STD-202, Method 204 – 204				10 g's from 10-2000 Hz		
	Thermal Cycle	MIL-STD-883, Method 1010, B				-55°C to +125°C, 15 minute dwell, 10 cycles		
	Hermeticity	MIL-STD-202, Method 112				Must meet 1 x 10 ⁻⁸		
	Max Soldering Conditions	See solder profile, Figure 1						

1. Stability is inclusive of five year aging at 25°C.

TTL Load – See load circuit diagram #1. HCMOS Load – See load circuit diagram #2.

MtronPTI reserves the right to make changes to the product(s) and service(s) described herein without notice. No liability is assumed as a result of their use or application.

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

