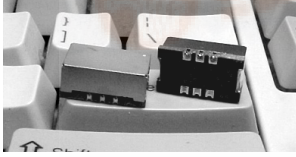


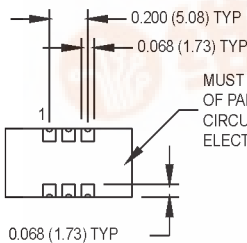
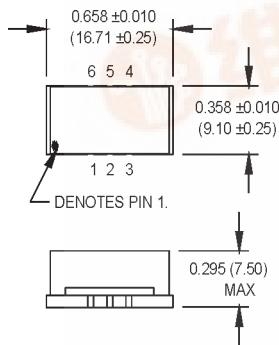
M6005 Series

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

MtronPTI®

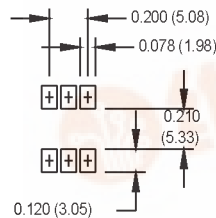


- Stratum 3 compliant stability and aging
- Ideal for WLL/DWDM/ATM, and SONET/SDH applications



All dimensions
in inches (mm).

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

	M6005	1	L	F	A	K	-R	00.0000	MHz
Product Series	M6005 = 3.3 V								
Temperature Range	1: 0°C to +70°C	2: -40°C to +85°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	K: FR-4, 6 Pad								
RoHS Compliance	Blank: non-RoHS compliant part	-R: RoHS compliant part							
Frequency (customer specified)									

M6005Sxxx - Contact factory for datasheet.

PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition/Notes
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)				
Aging						See Note 1
1st Year				1.5	ppm	
Thereafter (per year)				0.5	ppm	
Input Voltage	V _{dd}	3.15	3.3	3.45	V	
Input Current	I _{dd}			50	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				
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
Shock	MIL-STD-202, Method 213, C					100 g's
Vibration	MIL-STD-202, Method 201 – 204					10g'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 Cond.	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 Lead Free Solder Profile

