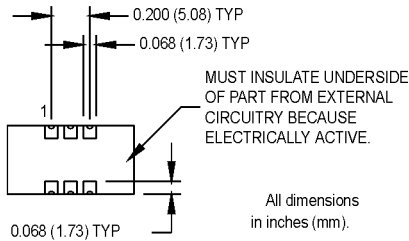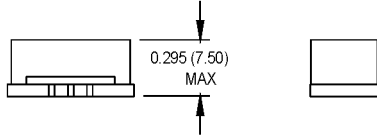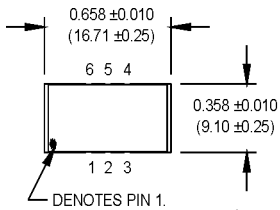# M6005 Series
9x14 mm FR-4, 3.3 Volt, HCMOS/TTL, TCXO

MtronPTI

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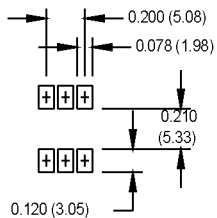
Ordering Information

00.0000
M6005 1 L F A D -R MHz

Product Series
M6005 = 3.3 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
K: FR-4, 6 Pad

RoHS Compliance
Blank: non-RoHS compliant part
-R: RoHS compliant part

Frequency (customer specified)

0.658 ±0.010
(16.71 ±0.25)

6 5 4

0.358 ±0.010
(9.10 ±0.25)

1 2 3

DENOTES PIN 1.

0.295 (7.50) MAX

0.200 (5.08) TYP
0.068 (1.73) TYP

MUST INSULATE UNDERSIDE OF PART FROM EXTERNAL CIRCUITRY BECAUSE ELECTRICALLY ACTIVE.

1

0.068 (1.73) TYP

All dimensions in inches (mm).

SUGGESTED SOLDER PAD LAYOUT

0.200 (5.08)
0.078 (1.98)

0.210 (5.33)

0.120 (3.05)

Pin Connections

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

Electrical Specifications

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	ÄF/F	(See Ordering Information)				See Note 1
Aging						
1st Year				1.5	ppm	
Thereafter (per year)				0.5	ppm	
Input Voltage	Vdd	3.15	3.3	3.45	V	
Input Current	Idd			50	mA	
Output Type						CMOS/TTL
Load		2 TTL or 15 pF max.				
Symmetry (Duty Cycle)		(See Ordering Information)				
Logic "1" Level	Voh	2.5			V	
Logic "0" Level	Vol			0.5	V	
Rise/Fall Time	Tr/Tf			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

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

Please see **www.mtronpti.com** for our complete offering and detailed datasheets. Contact us for your application specific requirements: MtronPTI **1-800-762-8800.**