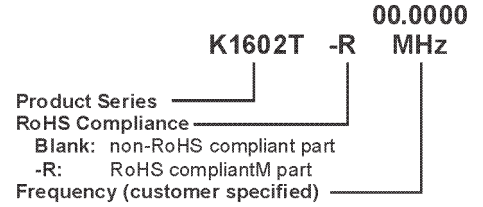


K1602T Series

14 DIP, 5.0 Volt, CMOS/TTL, TCXO

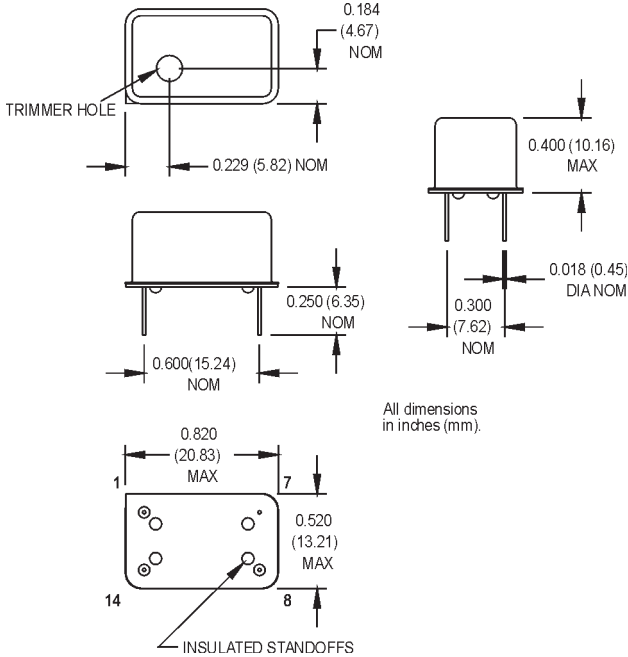


Ordering Information



M6048Sxxx - Contact factory for datasheet.

- Former **Champion TECHNOLOGIES, INC.** Product
- Phase-Locked Loops, SONET, Reference Signal, Signal Tracking, ATM



Pin Connections

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

PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition/Notes	
Frequency Range	F	2		30	MHz		
Operating Temperature	T _A	-40		+85	°C		
Storage Temperature	T _S	-40		+85	°C		
Initial Calibration		-1.5		+1.5	ppm	See Note 1	
Stability vs. Temperature		-2.0		+2.0	ppm		
Aging (10 Year)		-2		+2	ppm		
Manual Adjusted Tuning Range		-5		+5	ppm		
Input Voltage	V _{dd}	4.75	5.0	5.25	V		
Input Current	I _{dd}			20	mA		
Output Type						HCMOS/TTL	
Load		5 TTL or 15 pF HCMOS				See Note 2	
Symmetry (Duty Cycle)						See Note 3	
< 14 MHz		45		55	%		
≥ 14 MHz		40		60	%		
Logic "1" Level	V _{oh}	4.5			V		
Logic "0" Level	V _{ol}			0.5	V		
Rise Time	T _r		3.5	9.0	ns		
Fall Time	T _f		2.0	8.0	ns		
Start Up Time				20	ms		
Phase Noise (typical) @ 20 MHz		10 Hz -80	100 Hz -108	1 kHz -125	10 kHz -132	100 kHz -155	Offset from carrier dBc/Hz
Mechanical Shock	Per MIL-STD-202, Method 213, Condition C (100 g's, 6 ms duration, ½ sinewave)						
Vibration	Per MIL-STD-202, Method 201 & 204 (10 g's from 10-2000 Hz)						
Hermeticity	Per MIL-STD-202, Method 112, (1x10 ⁻⁸ atm. cc/s of Helium)						
Thermal Cycle	Per MIL-STD-883, Method 1010, Condition B (-55°C to +125°C, 15 min. dwell, 10 cycles)						
Solderability	Per EIAJ-STD-002						
Soldering Conditions	+240°C max. for 10 secs.						

1. Initial Calibration guaranteed at time of shipment.
2. TTL Load – see load circuit diagram #1. HCMOS load – see load circuit diagram #2.
3. Symmetry is measured at 1.4 V with TTL load, and at 50% V_{dd} with HCMOS load.

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.