

K1602T Series

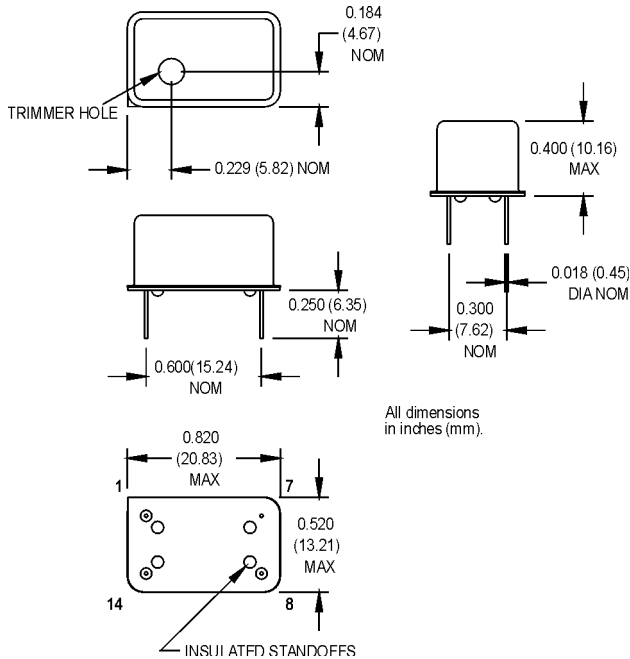
14 DIP, 5.0 Volt, CMOS/TTL, TCXO



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

Ordering Information

	K1602T	-R	00.0000
Product Series			
RoHS Compliance			
Blank:	non-RoHS compliant part		
-R:	RoHS compliant part		
Frequency (customer specified)			



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)						Offset from carrier
@ 20 MHz	10 Hz	100 Hz	1 kHz	10 kHz	100 kHz	dBc/Hz
	-80	-108	-125	-132	-155	
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.					

- Initial Calibration guaranteed at time of shipment.
- TTL Load – see load circuit diagram #1. HCMOS load – see load circuit diagram #2.
- 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.

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