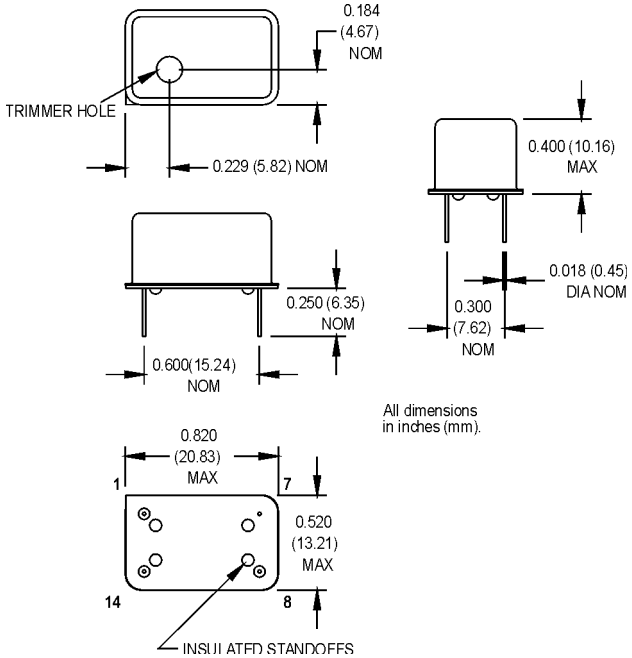
K1602T Series
14 DIP, 5.0 Volt, CMOS/TTL, TCXO

- Former Champion Technologies, Inc. Product
- Phase-Locked Loops, SONET, Reference Signal, Signal Tracking, ATM

Ordering Information

K1602T -R 00.0000 MHz

- 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
Electrical Specifications	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	Vdd	4.75	5.0	5.25	V	
	Input Current	Idd			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	Voh	4.5			V	
	Logic "0" Level	Vol			0.5	V	
	Rise Time	Tr		3.5	9.0	ns	
	Fall Time	Tf		2.0	8.0	ns	
	Start Up Time				20	ms	
	Phase Noise (typical)	10 Hz	100 Hz	1 kHz	10 kHz	100 kHz	Offset from carrier
	@ 20 MHz	-80	-108	-125	-132	-155	dBc/Hz
Environmental	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% Vdd with HCMOS load.