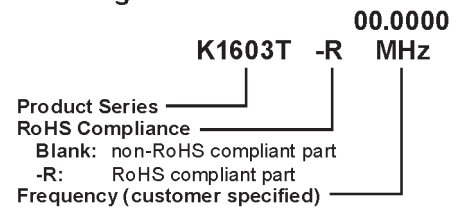


K1603T Series

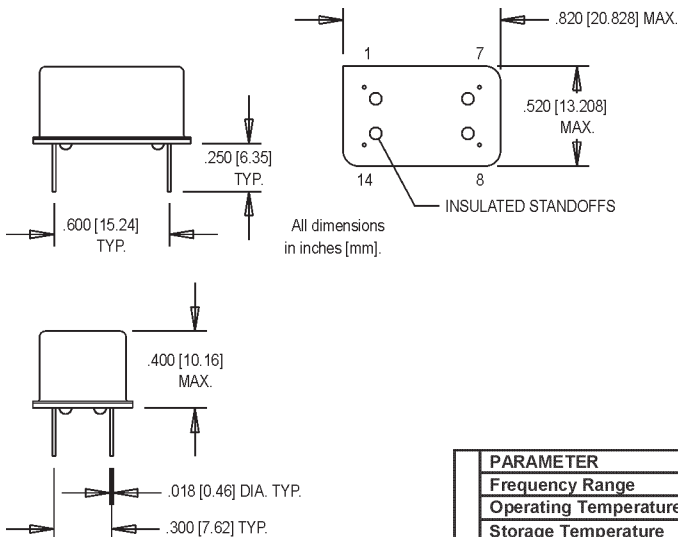
14 pin DIP, 5.0 Volt, CMOS/TTL, TCXO



Ordering Information



- Former **Champion** Product
TECHNOLOGIES, INC.
- Clocking "Sync" to NTSC Video Standards, Reference Signal, Signal Tracking
- Stratum 3 Compliant



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	
	Frequency Stability	ΔF/F			+4.6	ppm	
	Aging (10 Year)		-2		+2	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
	Symmetry (Duty Cycle)						See Note 1
	< 14 MHz		45		55	%	See Note 2
	≥ 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				10	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
Environmental	Mechanical Shock	Per MIL-STD-202, Method 213, Condition C (100 g's, 6 ms duration, 1/2 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. TTL Load – see load circuit diagram #1. HCMOS load – see load circuit diagram #2.
 2. Symmetry is measured at 1.4 V with TTL load, and at 50% V_{dd} with HCMOS load.