

K1601TE Series

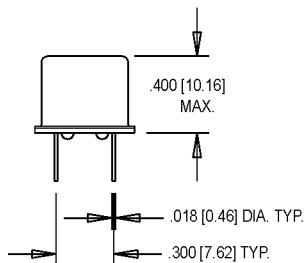
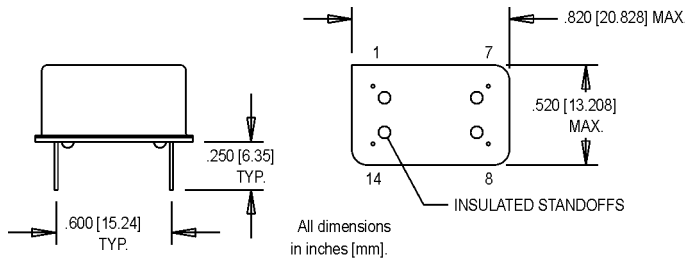
14 pin DIP, 5.0 Volt, CMOS/TTL, TCVCXO



- Former **Champion** TECHNOLOGIES, INC. Product
- Phase-Locked-Loops, Clocking "Sync" to NTSC Video Standards, Reference Signal, Signal Tracking

Ordering Information

	K1601TE	X	-R	00.0000 MHz
Product Series				
Pullability				
Blank:	±28 ppm min.			
W:	±40 ppm min.			
RoHS Compliance				
Blank:	non-RoHS compliant part			
-R:	RoHS compliant part			
Frequency (customer specified)				
(Consult factory for "TEW" option)				



Pin Connections

PIN	FUNCTION
1	Control Voltage
7	Ground/Case Gnd
8	Output
14	+Vdd

	PARAMETER	Symbol	Units				
Electrical Specifications	Frequency Range	F	2.0 to 35, 38.888, 40.000				
	Frequency Stability	$\Delta F/F$					
	Overall		Inclusive of Calibration, Temperature, Voltage, Load, and Aging				
	25° Calibration		±3.0				
	Aging 10 Years		±2.0				
	Over Operating Temperature		±1.0				
	Minimum Deviation		±2.8 ("TEW" model ±40)				
	Minimum Deviation Sensitivity		+14				
	Linearity		10				
	Modulation Bandwidth (±3dB) fm		>20				
	Nominal Control Voltage		2.5				
	Control Voltage Range	V _c	0.5 to 4.5				
	Transfer Function		Positive				
	Input Impedance		>50Ω @ 10 KHz				
	Operating Temperature	T _A	0 to 55				
	Storage Temperature	T _S	-40 to 85				
	Input Voltage	V _{dd}	+5.0 ±5%				
	Input Current	I _{dd}	<20				
Environmental Specifications	Symmetry (Duty Cycle)		45/55 < 14 MHz; 40/60 ≥ 14 MHz				
	Start up Time		<20				
	Phase Noise (Typical)	10 Hz	100 Hz	1KHz	10 KHz	100 KHz	
		-70	-95	-120	-140	-150	
	Temperature Cycle	MIL-STD-883, Method 1010, Condition B		-55°C to +125°C; Air-to-Air; 100 cycles; 10 min. dwell			
	Mechanical Shock	MIL-STD-883, Method 2002, Condition B		1500 g's			
	Vibration	MIL-STD-883, method 2007, Condition B		20-2000 Hz; 0.06 inch; 15 g's; 3 planes			
	Humidity Steady State	MIL-STD-202, Method 103		40°C, 90%-95% R.H.; 56 days			
	Thermal Shock	MIL-STD-883, Method 1011.7, Condition B		100°C to 0°C; Water-to-Water; 15 cycles			
	Electrostatic Discharge	MIL-STD-883, Method 3015, Class II		2 KV to 4 KV Threshold			
	Solderability	MIL-STD-883, Method 2022.2		Solder dip; Meniscograph Criteria			
	Hermeticity	MIL-STD-883, Method 1014.8, Condition A1		Mass pectro. 2 x 10 ⁻⁸ atoms. CC/sec He			
	Lead Integrity	MIL-STD-883, Method 2004.5, Condition A, B1		Lead tension & bend stress			
	Marking Permanence	MIL-STD-883, Method 2015.8		Resistance to solvents			
	Life Test	MIL-STD-883, Method 1005.6		125°C, powered, 1000 hours minimum			

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