

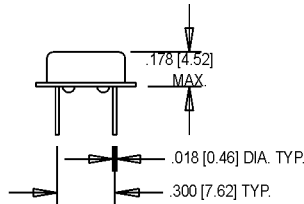
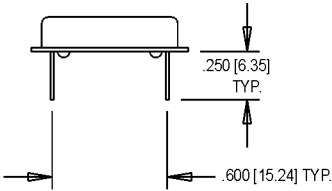
K1525C Series

14 DIP, 5.0 Volt, CMOS/TTL, VCXO

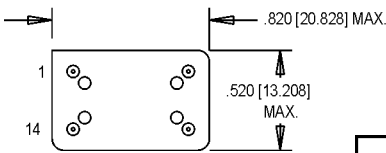


- Former **Champion TECHNOLOGIES, INC.** Product
- Phase-Locked Loops (PLL's), Clock Recovery, Reference Signal Tracking, Synthesizers, Frequency Modulation/Demodulation

Ordering Information				00.0000 MHz
Product Series	K1525C	X	X	X
Model Selection	A: ±100 - ±150 ppm Pull	D: ±80 - ±120 ppm Pull		
Temperature Range	Blank: 0°C to +70°C	M: -40°C to +85°C		
Symmetry/Logic Compatibility	Blank: TTL/CMOS 40%/60%	C: CMOS 45%/55%	T: TTL 45%/55%	
Frequency (customer specified)				



All dimensions in inches [mm].



Pin Connections

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

PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition
Frequency Range	F	2		55	MHz	
Frequency Stability:	$\Delta F/F$					
Overall		Inclusive of Calibration, Temperature, Voltage, Load, and Aging				
0°C to +70°C				±25	ppm	
-40°C to +85°C				±50	ppm	
Pullability		(See Ordering Information)				
Linearity				10	%	
Modulation Bandwidth	fm	>20			kHz	±3dB
Control Voltage	Vc	0.5	2.5	4.5	V	
Transfer Function		Positive				
Input Impedance		>50K Ω				@ 10 kHz
Operating Temperature	T _A	-40		+85	°C	
Storage Temperature	T _s	-40		+125	°C	
Input Voltage	Vdd	4.5	5.0	5.5	V	
Input Current	I _{dd}			26	mA	
Symmetry (Duty Cycle)		40		60	%	CMOS/TTL
Start up Time				10	ms	
Phase Noise (Typical)		10 Hz	100 Hz	1 kHz	10 kHz	100 kHz
		-65	-95	-120	-140	-150
Temperature Cycle		MIL-STD-883, Method 1010, Condition B			-55°C to +125°C; Air-toAir; 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, Cond. 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, Cond. A1			Mass spectro. 2 x 10 ⁻⁸ atoms. CC/sec He	
Resistance to Soldering		See Page 147				
Lead Integrity		MIL-STD-883, Mtd. 2004.5, Cond. 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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