

K1528D Series

14 DIP, 5.0 Volt, CMOS, 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

K1528D X X X X

Product Series _____

Model Selection _____

B: ±100 - ±150 ppm Pull

D: ±60 - ±110 ppm Pull

Symmetry/Logic Compatibility _____

Blank: CMOS 40%/60%

S: CMOS 45%/55%

Temperature Range _____

Blank: 0°C to +70°C

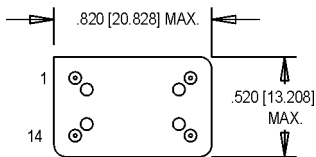
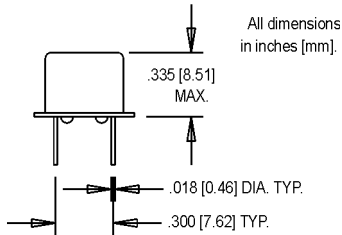
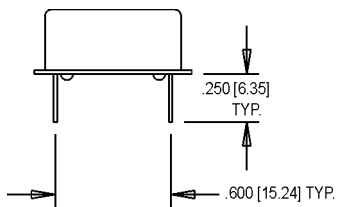
M: -40°C to +85°C

Tri-State Option _____

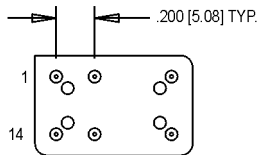
Blank: No Tri-State

E: Tri-State Option

Frequency (customer specified) _____



OPTIONAL 6-PIN PACKAGE WITH TRISTATE



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	35		105	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				15	%	
Modulation Bandwidth	fm	>20			kHz	±3dB
Control Voltage	Vc	0.5	2.5	4.5	V	
Transfer Function		Positive				
Input Impedance		>50KΩ				
Operating Temperature	TA	-40		+85	°C	
Storage Temperature	Ts	-40		+125	°C	
Input Voltage	Vdd	4.75	5.0	5.25	V	
Input Current	Idd			40	mA	
Symmetry (Duty Cycle)		(See Ordering Information)				
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-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, 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	

VCXO

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