

# K1526C & K1536C

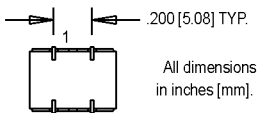
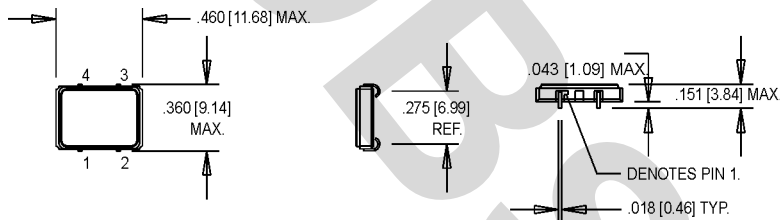
9x11 mm, 5.0 or 3.3 Volt, CMOS/TTL, VCXO



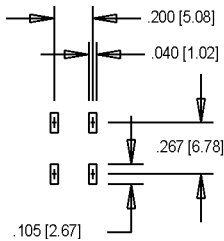
### Ordering Information

Product Series	K15X6CX	X	X	00.0000 MHz
Model Selection:	See Electrical Specs			
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)				

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



SUGGESTED SOLDER PAD LAYOUT



### Pin Connections

PIN	FUNCTION
1	Voltage Control
2	Ground & Gnd Plane
3	Output
4	+Vdd

PARAMETER	Symbol				Units	
Model		K1526CA K1536CA	K1526CD K1536CD	K1526CE		
Frequency Range	F	2 to 55	55.1 to 80	2 to 40	MHz	
Frequency Stability Overall	$\Delta F/F$	Inclusive of Calibration, Temperature, Voltage, Load, and Aging				
0°C to +70°C		±25	±40	±25	±32	
-40°C to +85°C		±50	±60	±50	±50	
Pullability Minimum		±100	±80	±80	±200	
Maximum		±150	±160	±130		
<b>Electrical Specifications</b>						
PARAMETER	Symbol	Min.	Typ.	Max.	Units	
Operating Temperature	T <sub>A</sub>	(See ordering information)				
Storage Temperature	T <sub>S</sub>	-40		+125	°C	
Aging 1 <sup>st</sup> Year		-3/+5		+3/+5	ppm	
Thereafter (per year)		-1/+2		+1/+2	ppm	
Control Voltage	V <sub>c</sub>	0.5 0.3 0	2.5 1.65	4.5 3.0 5.0	V	
Linearity				10	%	
Modulation Bandwidth	f <sub>m</sub>	20			kHz	
Input Impedance	Z <sub>in</sub>	50K			Ohms	
Input Voltage	V <sub>dd</sub>	4.5 3.0	5.0 3.3	5.5 3.6	V	
Input Current	I <sub>dd</sub>			30	mA	
Output Type					CMOS/TTL	
Load				15	pF	
Symmetry (Duty Cycle)		(See ordering information)				
Logic "1" Level	V <sub>oh</sub>	V <sub>dd</sub> - 0.5			V	
Logic "2" Level	V <sub>ol</sub>			0.5	V	
Output Current				20	mA	
Rise/Fall Time	T <sub>r</sub> /T <sub>f</sub>			5	ns	
Start up Time				10	ms	
Phase Jitter @ 26 MHz	φ <sub>J</sub>		4		ps RMS	
Phase Noise (Typical) @ 26 MHz		10 Hz -65	100 Hz -95	1 kHz -115	10 kHz -130	100 kHz -140
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 <sup>-8</sup> 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.				

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# MtronPTI Lead Free Solder Profile

