

K1526C & K1536C Series

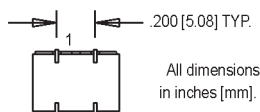
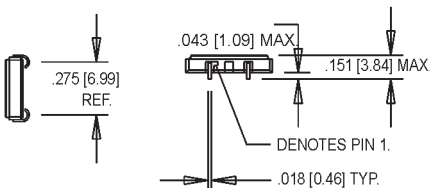
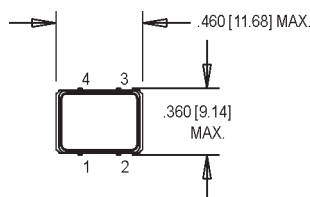
9x11 mm, 5.0 or 3.3 Volt, CMOS/TTL, VCXO



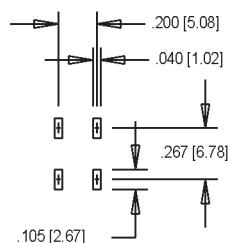
- Former **Champion** TECHNOLOGIES, INC. Product
- Phase-Locked Loops (PLL's), Clock Recovery, Reference Signal Tracking, Synthesizers, Frequency Modulation/Demodulation

Ordering Information

	K15X6CX	X	X	00.0000 MHz
Product Series				
K1526C = 5.0 Volt				
K1536C = 3.3 Volt				
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)				



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 55	2 to 40	MHz
Frequency Stability:	$\Delta F/F$	Inclusive of Calibration, Temperature, Voltage, Load, and Aging				
Overall						
0°C to +70°C		±25	±40	±25	±32	ppm
-40°C to +85°C		±50	±60	±50	±50	ppm
Pullability						
Minimum		±100	±80	±80	±200	ppm
Maximum		±150	±160	±130		ppm
PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition/Notes
Operating Temperature	TA	(See ordering information)				
Storage Temperature	TS	-40		+125	°C	
Aging						
1 st Year		-3/-5		+3/+5	ppm	<52 MHz / ≥52 MHz
Thereafter (per year)		-1/-2		+1/+2	ppm	<52 MHz / ≥52 MHz
Control Voltage	Vc	0.5 0.3 0	2.5 1.65	4.5 3.0 5.0	V V V	K1526C K1536C K1526CE
Linearity				10	%	Positive Monotonic Slope
Modulation Bandwidth	fm	20			kHz	+3 dB
Input Impedance	Zin	50K			Ohms	@ 10 kHz
Input Voltage	Vdd	4.5 3.0	5.0 3.3	5.5 3.6	V V	K1526C K1536C
Input Current	Idd			30	mA	
Output Type						CMOS/TTL
Load				15	pF	HCMOS
Symmetry (Duty Cycle)		(See ordering information)				
Logic "1" Level	Voh	Vdd -0.5			V	
Logic "2" Level	Vol			0.5	V	
Output Current				20	mA	
Rise/Fall Time	Tr/Tf			5	ns	20% to 80% Vdd, CL = 15 pF
Start up Time				10	ms	
Phase Jitter @ 26 MHz	φj		4		ps RMS	Integrated 12 kHz – 20 MHz
Phase Noise (Typical) @ 26 MHz		100 Hz -65	1 kHz -115	10 kHz -130	100 kHz -140	Offset from carrier dBc/Hz

Electrical Specifications

MtronPTI reserves the right to make changes to the product(s) and service(s) described herein without notice. No liability is assumed as a result of their use or application.

Please see www.mtronpti.com for our complete offering and detailed datasheets. Contact us for your application specific requirements: MtronPTI 1-800-762-8800.