

K1526C & K1536C

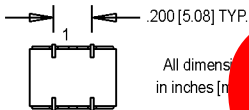
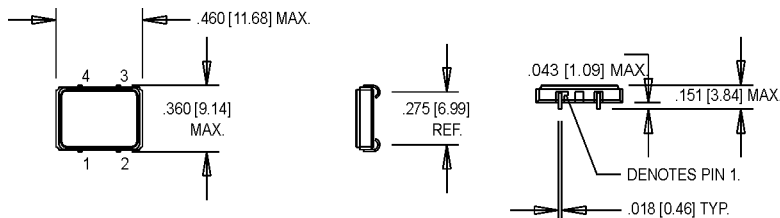
9x11 mm, 5.0 or 3.3 Volt, CMOS/TTL, VCXO



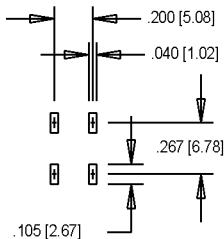
Ordering Information

	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)				

- 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

OBsolete

PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition/Notes
Frequency Stability	$\Delta F/F$					Inclusive of Calibration, Temperature, Voltage, Load, and Aging
Overall		±25	±40	±25	ppm	
0°C to +70°C		±50	±60	±50	ppm	
-40°C to +85°C						
Pullability		±100	±80	±80	ppm	
Minimum		±150	±160	±130	ppm	
Maximum						
PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition/Notes
Operating Temperature	T_A	(See ordering information)				
Storage Temperature	T_S	-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	V_C	0.5	2.5	4.5	V	K1526C
		0.3	1.65	3.0	V	K1536C
		0		5.0	V	K1526CE
Linearity				10	%	Positive Monotonic Slope
Modulation Bandwidth	f_m	20			kHz	+3 dB
Input Impedance	Z_{in}	50K			Ohms	@ 10 kHz
Input Voltage	V_{dd}	4.5	5.0	5.5	V	K1526C
		3.0	3.3	3.6	V	K1536C
Input Current	I_{dd}			30	mA	
Output Type						CMOS/TTL
Load				15	pF	HCMOS
Symmetry (Duty Cycle)		(See ordering information)				
Logic "1" Level	V_{oh}	$V_{dd} - 0.5$			V	
Logic "2" Level	V_{ol}			0.5	V	
Output Current				20	mA	
Rise/Fall Time	T_r/T_f			5	ns	20% to 80% V_{dd} , $CL = 15$ pF
Start up Time				10	ms	
Phase Jitter @ 26 MHz	ϕ_J		4		ps RMS	Integrated 12 kHz – 20 MHz
Phase Noise (Typical) @ 26 MHz		10 Hz	100 Hz	1 kHz	10 kHz	100 kHz
		-65	-95	-115	-130	-140
						Offset from carrier dBc/Hz
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, (1x10-8 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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