

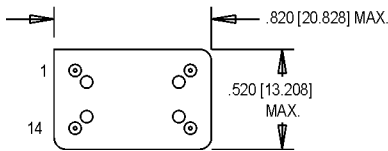
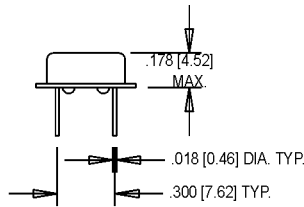
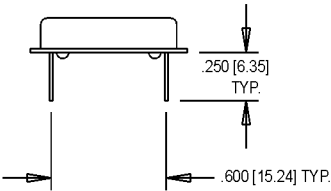
# K1525C Series

14 pin DIP, 5.0 Volt, CMOS/TTL, VCXO

**THIS PRODUCT IS NOT RECOMMENDED FOR NEW DESIGNS.  
PLEASE REFER TO THE MV3 or MV5 PRODUCT SERIES.**



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



All dimensions in inches [mm].

### Ordering Information

	K1525C	X	X	X	-R	00.0000	MHz
Product Series							
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%						
RoHS Compliance							
Blank:	non-RoHS compliant part						
-R:	RoHS compliant part						
Frequency (customer specified)							

### Pin Connections

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

PARAMETER	Symbol	Min.	Typ.	Max.	Units	Condition/Notes	
Frequency Range	F	2		55	MHz		
Operating Temperature	T <sub>A</sub>	(See Ordering Information)					
Storage Temperature	T <sub>s</sub>	-40		+125	°C		
Frequency Stability Overall	ΔF/F	Inclusive of Calibration, Temperature, Voltage, Load, and Aging					
0°C to +70°C				±25	ppm		
-40°C to +85°C				±50	ppm		
Aging							
1st Year		-3		+3	ppm		
Thereafter (per year)		-1		+1	ppm		
Pullability/APR		(See Ordering Information)					
Control Voltage	V <sub>c</sub>	0.5	2.5	4.5	V		
Linearity				10	%	Positive Monotonic Slope	
Modulation Bandwidth	f <sub>m</sub>	20			kHz	±3dB	
Input Impedance	Z <sub>in</sub>	50k			Ohms	@ 10 kHz	
Input Voltage	V <sub>dd</sub>	4.5	5.0	5.5	V		
Input Current	I <sub>dd</sub>			26	mA		
Output Type						HCMOS/TTL	
Load		5 TTL or 15 pF HCMOS					See Note 1
Symmetry (Duty Cycle)		(See Ordering Information)					See Note 2
Logic "1" Level	V <sub>oh</sub>	4.5			V		
Logic "0" Level	V <sub>ol</sub>			0.5	V		
Output Current				±16	mA		
Rise/Fall Time	T <sub>r</sub> /T <sub>f</sub>			4	ns		
Start up Time				10	ms		
Phase Jitter@ 26 MHz	φ <sub>J</sub>		4		ps RMS	Integrated 12 kHz - 20 MHz	
Phase Noise (Typical)	10 Hz	100 Hz	1 kHz	10 kHz	100 kHz	Offset from carrier	
@ 26 MHz	-65	-95	-120	-130	-140	dBc/Hz	

1. TTL load - see load circuit diagram #1. HCMOS load - see load circuit diagram #2.

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

## MtronPTI Lead Free Solder Profile

240°C  
All the remaining surface mount,  
both crystal and oscillator.

