

# K1525C Series

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



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

**Ordering Information**

00.0000 MHz

K1525C X X X -R

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

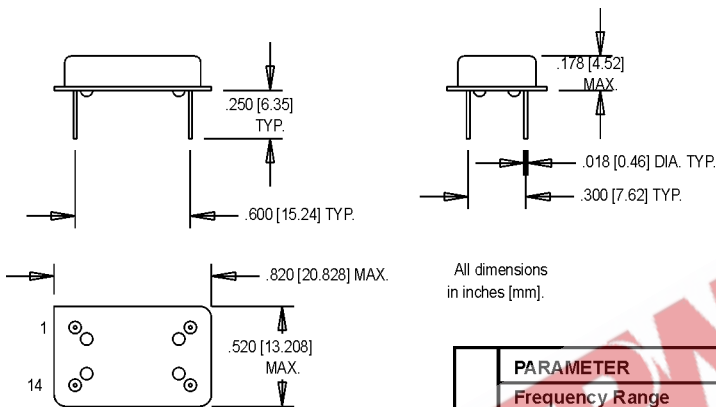
Symmetry/Logic Compatibility \_\_\_\_\_

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	Tr/Tf			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) @ 26 MHz		100 Hz	1 kHz	10 kHz	100 kHz	Offset from carrier	
		-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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