

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

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 _____

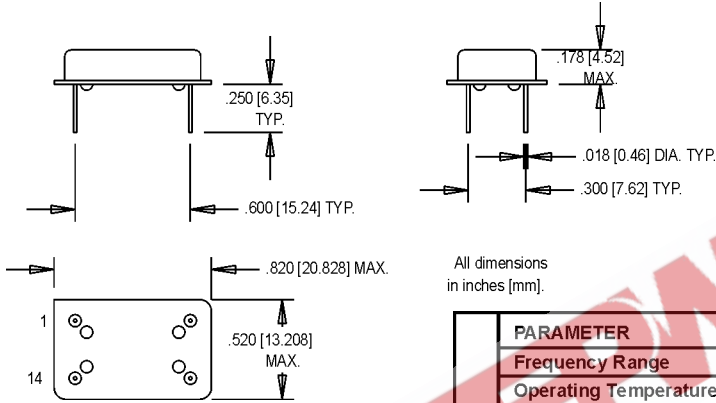
Blank: 0°C to +70°C
M: -40°C to +85°C

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 _A | (See Ordering Information) | | | | |
| Storage Temperature | T _s | -40 | | +125 | °C | |
| Frequency Stability | ΔF/F | Inclusive of Calibration, Temperature, Voltage, Load, and Aging | | | | |
| Overall | | | | | | |
| 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 _c | 0.5 | 2.5 | 4.5 | V | |
| Linearity | | | | 10 | % | Positive Monotonic Slope |
| Modulation Bandwidth | f _m | 20 | | | kHz | ±3dB |
| Input Impedance | Z _{in} | 50k | | | Ohms | @ 10 kHz |
| Input Voltage | V _{dd} | 4.5 | 5.0 | 5.5 | V | |
| Input Current | I _{dd} | | | 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 _{oh} | 4.5 | | | V | |
| Logic "0" Level | V _{ol} | | | 0.5 | V | |
| Output Current | | | | ±16 | mA | |
| Rise/Fall Time | Tr/Tf | | | 4 | ns | |
| Start up Time | | | | 10 | ms | |
| Phase Jitter@ 26 MHz | φ _J | | 4 | | ps RMS | Integrated 12 kHz - 20 MHz |
| Phase Noise (Typical) | | 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.

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.

MtronPTI Lead Free Solder Profile

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

