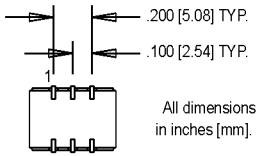
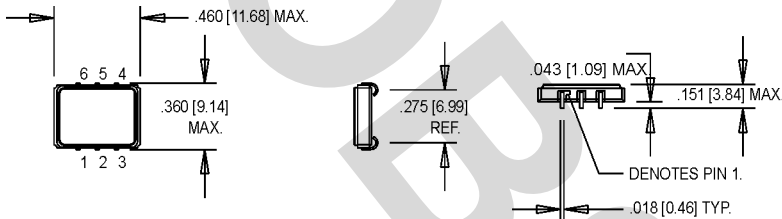


K1526B & K1536B Series

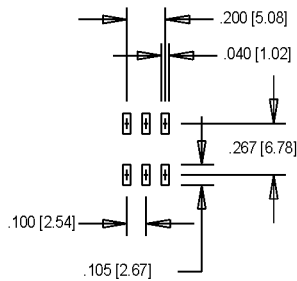
9x11 mm, 5.0 or 3.3 Volt, CMOS/TTL, VCXO



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



SUGGESTED SOLDER PAD LAYOUT



Pin Connections

| PIN | FUNCTION |
|-----|--------------------|
| 1 | Voltage Control |
| 2 | Tristate |
| 3 | Ground & Gnd Plane |
| 4 | Output |
| 5 | N/C |
| 6 | +Vdd |

Ordering Information

K15X6BX X X 00.0000 MHz

Product Series
 K1526B = 5.0 Volt
 K1536B = 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)

| PARAMETER | Symbol | | | | Units | | |
|---|--------------------------------|--|--------------------|-------------------|-----------------|--|-------------------------------|
| Model | | K1526BA K1536BA | K1526BD K1536BD | K1526BE | | | |
| Frequency Range | F | 2 to 55 | 55.1 to 80 | 2 to 55 | 2 to 40 | MHz | |
| Frequency Stability: Overall | $\Delta F/F$ | Inclusive of Calibration, Temperature, Voltage, Load, and Aging | | | | | |
| 0°C to +70°C | | ±25 | ±40 | ±25 | ±32 | ppm | |
| -40°C to +85°C | | ±50 | ±60 | ±50 | ±50 | ppm | |
| Pullability Minimum Maximum | | ±100 ±150 | ±80 ±160 | ±80 ±130 | ±200 | ppm ppm | |
| PARAMETER | Symbol | Min. | Typ. | Max. | Units | Condition/Notes | |
| Operating Temperature | T _A | (See Ordering Information) | | | | | |
| Storage Temperature | T _s | -40 | | +125 | °C | | |
| Aging 1st Year Thereafter (per year) | | -3/-5 -1/-2 | | +3/+5 +1/+2 | ppm ppm | < 52 MHz / ≥ 52 MHz < 52 MHz / ≥ 52 MHz | |
| Control Voltage | V _c | 0.5 0.3 0 | 2.5 1.65 | 4.5 3.0 5.0 | V V V | K1526B K1536B K1526BE | |
| 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 3.0 | 5.0 3.3 | 5.5 3.6 | V V | K1526B K1536B | |
| 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 "0" 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 | |
| Tristate Function | | Input Logic "1" or floating: output active Input Logic "0": output disables to high-Z | | | | | |
| Start up Time | | | | 10 | ms | | |
| Phase Jitter @ 26 MHz | φ _J | | 4 | | ps RMS | Integrated 12 kHz - 20 MHz | |
| Phase Noise (Typical) @ 26 MHz | | 100 Hz -65 | 1 kHz -95 | 10 kHz -115 | 100 kHz -130 | 100 kHz -140 | Offset from carrier dBc/Hz |

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MtronPTI Lead Free Solder Profile

