

XO5161 Series

14 pin DIP, 12.0 Volt, HCMOS/TTL, OCXO



- Standard DIP/DIL package (20.3 x 13.2 x 7.6 mm) offering tight stabilities, fast warm-up, and low current
- Ideal for PCS base stations, cellular base stations, phase locking, and SAR/SAT applications

Ordering Information

XO5161 A R1 -R 00.0000 MHz

Product Series _____

Stability/Temperature _____

A: ± 0.05 ppm, 0°C to +60°C
 B: ± 0.10 ppm, -20°C to +70°C
 C: ± 0.20 ppm, -40°C to +85°C

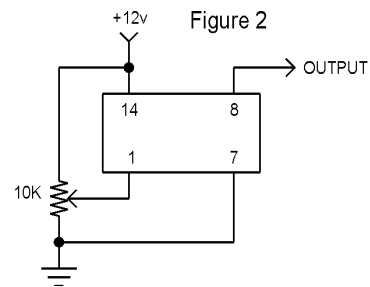
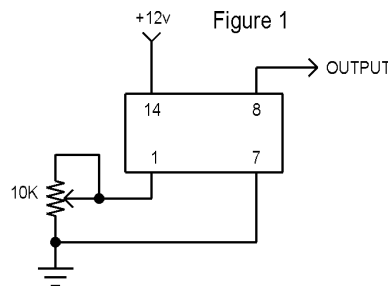
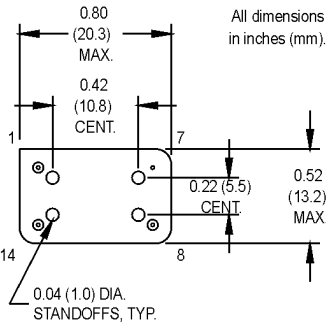
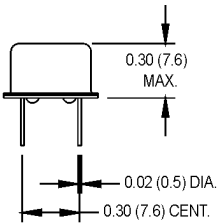
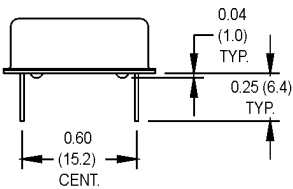
Frequency Adjustment Method: _____

R1: External Resistor Adjust (See Figure 1)
 V5: Voltage Adjust (See Figure 2)

RoHS Compliance _____

Blank: non-RoHS compliant part
 -R: RoHS compliant part

Frequency (Customer Specified) _____



Pin Connections

| PIN | FUNCTION |
|-----|-----------------------------|
| 1 | Frequency Adjust |
| 7 | Case ground & supply return |
| 8 | R.F. Output |
| 14 | Supply (+) |

| PARAMETER | Symbol | Min. | Max. | Units | Condition |
|------------------------------|--------------------------------|-----------------------------|----------------------------|--------------------------------------|------------------------------------|
| Frequency Range | F | 10 | 20 | MHz | |
| Operating Temperature | T _A | (See Ordering Information) | | °C | |
| Stability Over Temperature | $\Delta F/F$ | (See Ordering Information) | | ppm | |
| Short Term Stability | | | 5×10^{-11} | | 0.1 to 30 secs. |
| Aging (First Year) | | | ± 0.7 | ppm | |
| Aging (10 Years) | | | ± 4.0 | ppm | |
| Frequency Vs. Supply | | | ± 0.1 | ppm | |
| Frequency Vs. Load | | | ± 0.01 | ppm | |
| Supply Voltage | V _{cc} | +11.5 | +12.5 | Volts | |
| Warm-Up Time | | To spec after 30 secs. | | | 0°C |
| Warm-Up Current | | | 250 | mA | After 10 secs. |
| Supply Current | I _{cc} | | 25 40 | mA | +30°C -20°C |
| Output Signal | | HCMOS/TTL Compatible | | | |
| Rise/Fall Time | T _r /T _f | | 7 | ns | Ref. 10% and 90% |
| Logic "0" Level | V _{ol} | | 0.4 | Volts | |
| Logic "1" Level | V _{oh} | V _{cc} - 0.5 | | Volts | |
| Symmetry | Sym | | 40/60 | % | Ref. To 1/2 V _{cc} |
| Output Load | | | 15 pf HCMOS 10 LS TTL | | |
| Frequency Adjustment (Pin 1) | | ± 4 | | ppm | See Figure 1 or 2 |
| Tuning Slope | | | Positive | | |
| Input Impedance (Pin 1) | | 4.7K | | ohms | |
| Phase Noise | | | -60 -90 -120 -130 | dBc/Hz dBc/Hz dBc/Hz dBc/Hz | (BW = 1 Hz) Offset from carrier |
| Mechanical Shock | | 2000 g, 0.3 mS, 1/2 sine | | | |
| Vibration | | 2000 Hz, 10 g | | | |
| Storage Temperature | | -55°C to +125°C | | | |
| Hermeticity | | Per MIL-STD-202, Method 112 | | | |
| Solderability | | EIAJ-STD-002 | | | |

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