



Model XO5160-014

Oven Controlled Crystal Oscillator

Electrical Specifications (typical)

Nominal Frequency (Fo): 16.0MHz

Frequency Stability

Over Temperature Range, ± 0.5 ppm
Over Supply Variation, ± 0.1 ppm
Over Load Variation, ± 0.01 ppm
Short Term, 0.1sec. - 30sec., 0.5ppb

Aging

1st Year Aging, ± 1.0 ppm, maximum
Over 10-years, ± 4.0 ppm, maximum
Adjustment Method, External Voltage,
0.5V_{DC} to +5V_{DC}
Adjustment Tuning Range, ± 4 ppm
Tuning Port Input Impedance, $> 47K\Omega$
Slope, Positive

Warm Up Time @ 0°C (maximum)

to within specification, 60 seconds

Output (HCMOS)

Level, Low (0.4V_{DC}) – High (4.5V_{DC})
Duty Cycle, 40% (minimum)/60% (maximum)
Rise/Fall Times; T_R < 7nsec, T_F < 7nsec
Load, 10K Ω // 10pF nominal, $\pm 10\%$

SSB Phase Noise (typical)

-90dBc/Hz @ 10Hz offset
-125dBc/Hz @ 100Hz offset
-140dBc/Hz @ 1kHz offset

Power

Supply Voltage, +5.0V_{DC} $\pm 5\%$
Current, @ +20°C Steady State, 100ma, maximum
@ +30°C Steady State, 75ma, maximum
@ Warm Up, 250ma, maximum

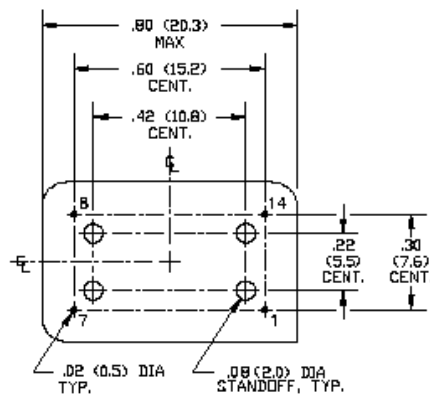
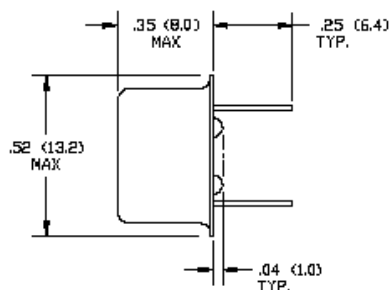
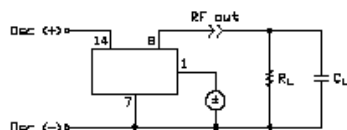
Temperature Range

Operating, -40°C to +55°C
Storage, -55°C to +55°C

Dimensions are in inches (mm).

Pin connections
1. Frequency adjust
7. Case ground & supply return
8. R.F. Output
14. Supply (+)

Pin numbers shown for ref. only.
Numbers are not marked on unit.



Revised: July 29, 2003