



Model XO5083-022

Oven Controlled Crystal Oscillator

Electrical Specifications (typical)

Nominal Frequency (F_0): 10.0MHz

Frequency Stability

Over Temperature: $\leq \pm 10$ ppb

Daily Aging: $\leq \pm 0.50$ ppb

Yearly Aging: $\leq \pm 0.1$ ppm

vs Supply: $\leq \pm 2$ ppb/percent

Short Term Stability: ≤ 0.01 ppb/second

Frequency Adjustment

Method: External Voltage, $0V_{DC}$ to $+10.0V_{DC}$

Range: Sufficient for 10 years aging

Modulation Bandwidth: ≥ 1 KHz

Slope: Positive

Output (Sinewave)

$\geq +7$ dBm

Load: 50Ω , $\pm 10\%$

Harmonics: ≤ -30 dBc

Warm Up Time @ 25°C

(relative to 2 hrs after turn-on following 24 hrs off)
to within 0.1ppm of final frequency: 3.0 minutes

SSB Phase Noise

-125dBc/Hz @ 10Hz offset

-152dBc/Hz @ 100Hz offset

-160dBc/Hz @ 1kHz offset

-165dBc/Hz @ 10kHz offset

-165dBc/Hz @ 100kHz offset

Power

Supply Voltage: $+12.0V_{DC}$, $\pm 5\%$

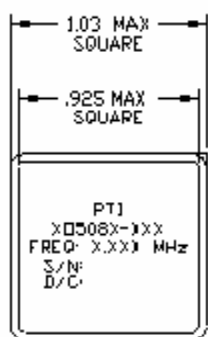
Power Consumption @ 25°C Steady State: 1.0W typ.

Power Consumption at turn-on: ≤ 3.6 W

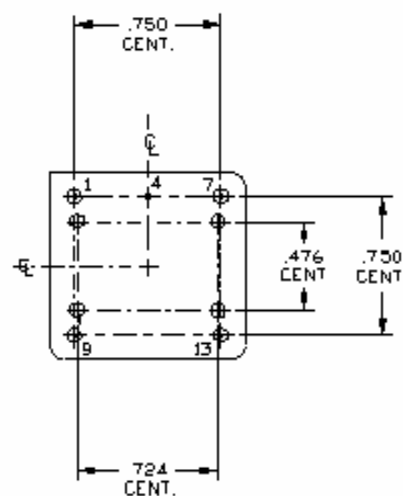
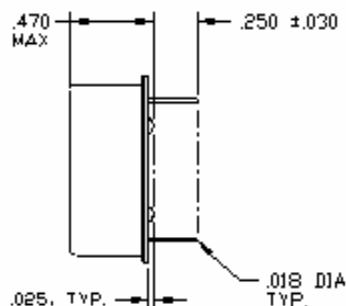
Temperature Range

Operating: -40°C to $+80^\circ\text{C}$

Storage: -55°C to $+85^\circ\text{C}$



PIN NO'S. SHOWN FOR REFERENCE ONLY.



PIN ASSIGNMENTS

1	RF OUTPUT
4	CASE GROUND
7	V TUNE
13	N/C
19	SUPPLY VOLTAGE