



Model XO5083-022 Oven Controlled Crystal Oscillator

Electrical Specifications (typical)

Nominal Frequency (F₀): 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: 50 Ω , $\pm 10\%$

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

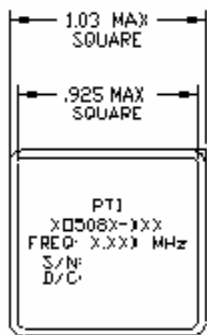
- 125dBc/Hz @ 10Hz offset
- 152dBc/Hz @ 100Hz offset
- 160dBc/Hz @ 1kHz offset
- 165dBc/Hz @ 10kHz offset
- 165dBc/Hz @ 100kHz offset

Power

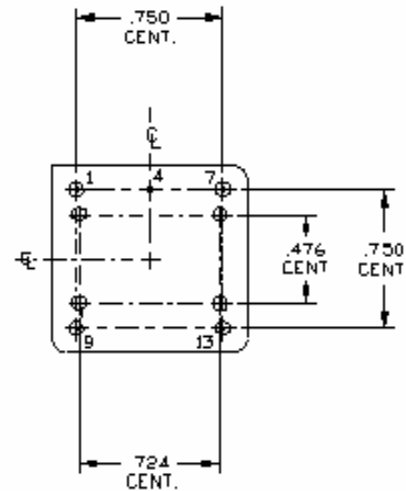
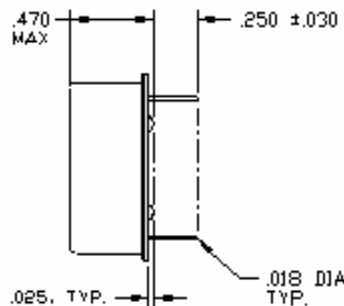
- Supply Voltage: +12.0V_{DC}, $\pm 5\%$
- Power Consumption @ 25°C Steady State: 1.0W typ.
- Power Consumption at turn-on: ≤ 3.6 W

Temperature Range

- Operating: -40°C to +80°C
- Storage: -55°C to +85°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