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Model XO5085-001R Oven Controlled Crystal Oscillator

Full RoHS Compliance

<u>Electrical Specifications</u> (National Instruments Part#: TBD)

Nominal Frequency (Fo): 100.0MHz

Frequency Stability

Over temperature: ≤±100ppb Aging (after 30 days power on)

10-Years: $\leq \pm 1.0$ ppm

vs Supply Variation ($\pm 5\%$ change in V_S): $\leq \pm 30$ ppb Short Term Stability (1.0 sec): 0.1ppb typical

Frequency Adjust

Method: External Voltage (V_C), $0V_{DC}$ to $+10.0V_{DC}$ Range: Sufficient for 10-years aging adjustment

 V_{REF} : +9 V_{DC} , typical, ≤ 0.5mA 3dB Modulation Bandwidth: ≥ 1kHz

Slope: Positive

Output (Sinewave)

Level: +9dBm typical Load: $50\Omega \pm 10\%$

Harmonics: -25dBc

Revised: August 8,2012

Spurious: -75dBc

G-sensitivity: 1.5 ppb/g Typical 3.0 ppb/g Maximum

SSB Phase Noise (Maximum)

-100dBc/Hz @ 10Hz offset

-132dBc/Hz @ 100Hz offset

-162dBc/Hz @ 1KHz offset

-170dBc/Hz @ 10KHz offset

-170dBc/Hz $@ \ge 100$ KHz offset

Warm Up Time @ 25°C (Maximum)

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

Power Supply

Supply Voltage (V_s): +11.3 V_{DC} ±5%

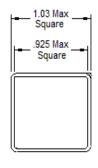
Power Consumption

@ 25C° Steady State: 1.5W typical

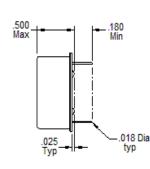
a Warm Up: ≤ 3.6 W

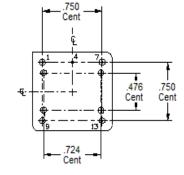
Temperature Range

Operating: 0°C to +80°C Storage: -55°C to +85°C









Rev. D

Pin Numbers Shown

for Reference Only