

Model XO5082-016R

Oven Controlled Crystal Oscillator

RoHS Compliant

Electrical Specifications

Nominal Frequency (F_0): 100.0MHz

Frequency Stability (ref. to 25°C)

vs Temperature: $\leq \pm 280$ ppb

Aging (after 30 days continuous operation)

15-Years: $\leq \pm 4.0$ ppm

Frequency Adjustment

Method: External voltage (V_{TUNE}), 0V_{DC} to +10 V_{DC}

Range: ± 4.0 ppm typical

Slope: Positive

Linearity: 10% maximum

Output (HCMOS)

Logic level '1': $> +4.5$ V

Logic level '0': < 0.5 V

Duty Cycle: 40/60% @ 50% level

Load: 15pF

SSB Phase Noise (typical, under static conditions)

-90dBc/Hz @ 10Hz offset

-120dBc/Hz @ 100Hz offset

-143dBc/Hz @ 1kHz offset

-150dBc/Hz @ 10kHz offset

Warm Up Time @ -25°C

To within 0.2ppm referenced to the frequency after power on for 1-hour: ≤ 3.0 -minutes

Power

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

Power Consumption (with V_S = nominal)

Steady State @ 25°C: ≤ 1.25 W

During Warm Up: ≤ 3.3 W

Environmental

Temperature Range

Operating (OTR): 0°C to +50°C

Storage (STR): -55°C to +85°C

