

Model XO5285-XXX Oven Controlled Crystal Oscillator

Electrical Specifications

Nominal Frequency (F_O): 77.76MHz (available from 50 MHz to 125MHz)

Frequency Stability (for 10 MHz)

vs. temperature, < ±0.2ppm vs. Power Supply (±5%), <±2ppb vs. Load (±10%), <±2ppb Aging after 30 days continuous operation < ±3ppm for 10 years

Frequency Adjustment (none for example, fixed)

Available

Method, external voltage, $0V_{DC}$ to $+4V_{DC}$ Range: sufficient for > 10-years aging adjustment Modulation bandwidth, > 1KHz Slope, Positive

Output (100EL PECL)

Level, '0' $<1.49V_{DC}$ '1' $>2.17~V_{DC}$ T_R/T_F , 300psec, typical Duty Cycle, 45/55%, typical Load,

Warm Up Time @ 25°C

To within 0.1ppm of final frequency, <2.0 minutes

SSB Phase Noise (maximum for 10 MHz)

- -90dBc/Hz @ 1Hz offset
- -120dBc/Hz @ 10Hz offset
- -140dBc/Hz @ 100Hz offset
- -150dBc/Hz @ 1kHz offset
- -150dBc/Hz @ 10kHz offset

Oscillator Disable (TTL/CMOS Level Input)

LOW (or Floating), Oscillator ENABLED HIGH, Oscillator DISABLED

Oven Ready (Open Collector Output)

LOW, oven NOT ready (3mA sink, maximum) HIGH, oven ready

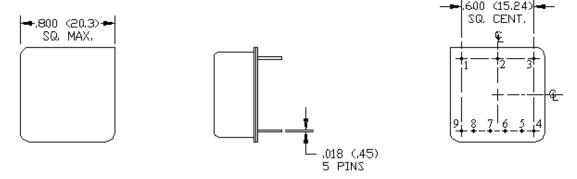
Power Supply Voltage: $+3.3V_{DC} \pm 5\%$ (available from +5V to +15V)

Power Consumption

<2.5W during warm up <1.25W steady state at 25°C

Operating Temperature Range: 0°C to +70°C

(available from -40 $^{\circ}$ C to 85 $^{\circ}$ C)



Standard Thru-Hole 9-pin Outline Drawing for the XO528X Family

Revised: December 5, 2005

Consult the Factory with your specific requirements.

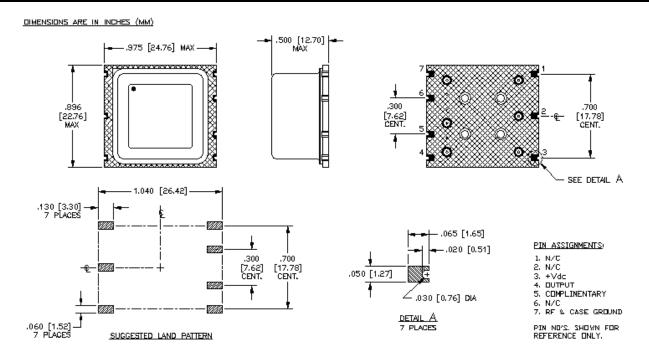
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Example of a SMD Implementation of the XO528X Family

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