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, 300*psec*, 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

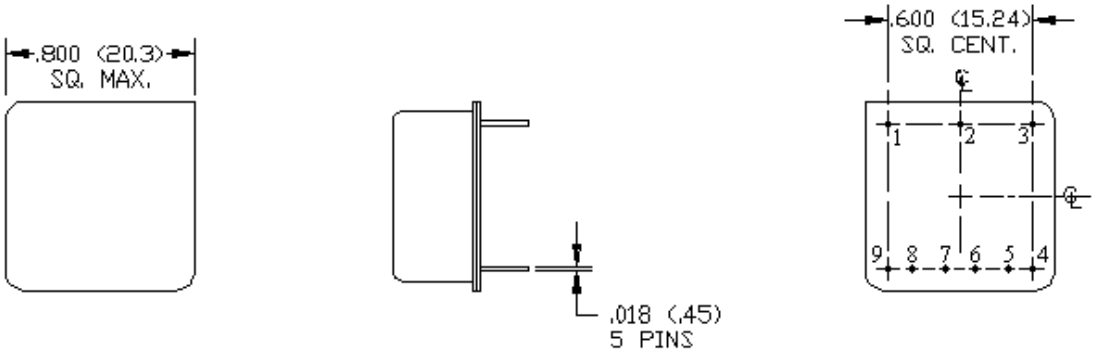
Oscillator Disable (TTL/CMOS Level Input)
LOW (or Floating), Oscillator ENABLED
HIGH, Oscillator DISABLED

Oven Ready (Open Collector Output)
LOW, oven NOT ready (3*mA* sink, maximum)
HIGH, oven ready

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

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

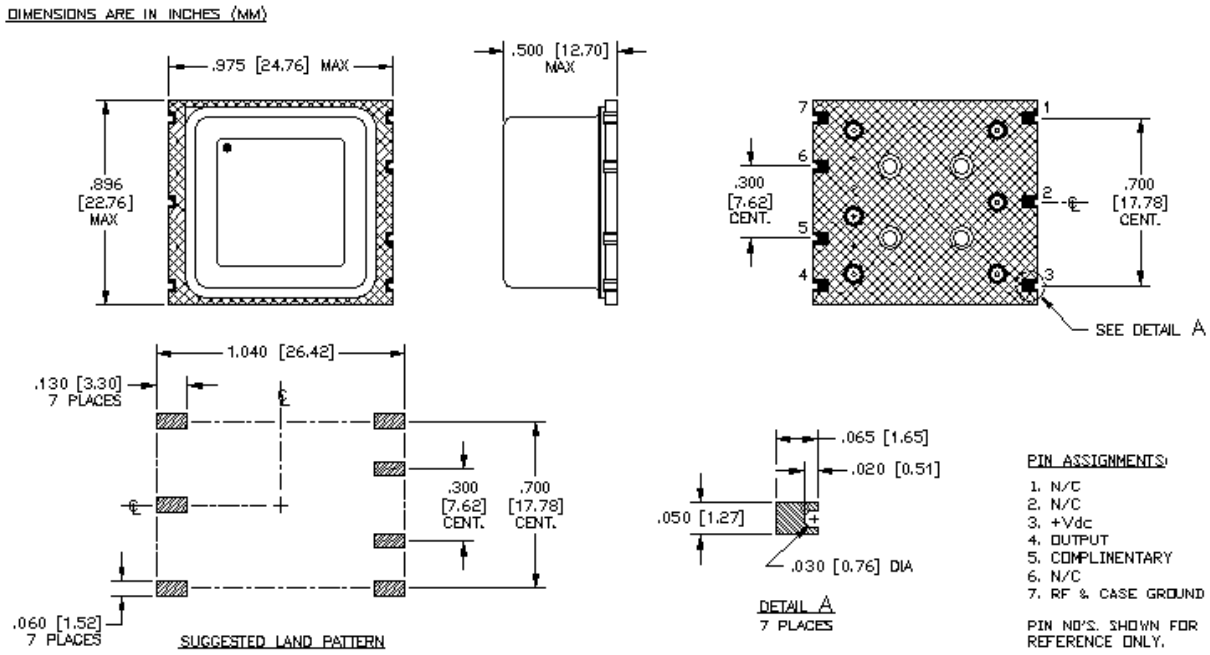
Operating Temperature Range: 0°C to +70°C
(available from -40℃ to 85℃)



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

MtronPTI, Inc. - 2525 Shader Road – Orlando – Florida – 32804-2780
Telephone: 407-298-2000 Fax: 407-293-2979 E-mail: Sales@mtronpti.com

Model XO5285-XXX
Oven Controlled Crystal Oscillator



Example of a SMD Implementation of the XO528X Family

MtronPTI, Inc. - 2525 Shader Road – Orlando – Florida – 32804-2780
Telephone: 407-298-2000 Fax: 407-293-2979 E-mail: Sales@mtronpti.com