



# Model XO3082-024 Temperature Compensated Crystal Oscillator

## Electrical Specifications

Nominal Frequency (F<sub>0</sub>): 64.0MHz

Calibrated Frequency (@ 25°C): ±2.5ppm, maximum

### Frequency Stability

Over operating temperature range, ±0.8ppm, max.

Aging per year, ±1ppm, maximum

For all causes over 10-years; including temperature variation, aging and power supply variation, ±6ppm, maximum

### Output (HCMOS)

Duty Cycle, 50%, ±10%

Load, 1 gate or 10pF, maximum

For Equipment Weight Less Than 80 Pounds	
Frequency	Level
5Hz to 65Hz	0.002g <sup>2</sup> /Hz
65Hz to 150Hz	6dB/Octave
150Hz to 500Hz	0.01g <sup>2</sup> /Hz
500Hz to 2000Hz	-6dB/Octave

Table 1: Random Vibration Levels - Operating

For Equipment Weight Less Than 80 Pounds	
Frequency	Level
5Hz to 500Hz	0.04g <sup>2</sup> /Hz
500Hz to 2000Hz	-6dB/Octave, overall acceleration 5.9 grams

Table 2: Random Vibration Levels – Non-Operating

Frequency Adjustment (none)

### Shock (Survival)

6g peak, 11msec, ½ sine pulse, with no degradation in the device's performance

### Vibration

Operating, per Table 1

Non-Operating, per Table 2

### SSB Phase Noise (typical)

Static Conditions	Under Vibration	Offset
	-62dBc/Hz	@ 5Hz offset
-75dBc/Hz	-68dBc/Hz	@ 10Hz offset
	-84dBc/Hz	@ 68Hz offset
-105dBc/Hz	-86dBc/Hz	@ 100Hz offset
	-85dBc/Hz	@ 150Hz offset
	-95dBc/Hz	@ 500Hz offset
-130dBc/Hz	-108dBc/Hz	@ 1kHz offset
	-117dBc/Hz	@ 2kHz offset
-140dBc/Hz		@ 10kHz offset

Note: The SSB phase noise figures cited above are per the random vibration levels called out in Table 1

### Power Supply

Voltage, +3.3V<sub>DC</sub> ±5%

Current Consumption, 35.0mA., maximum

### Temperature Range

Operating, -40°C to +85°C

Storage, -55°C to +85°C

MtronPTI  
DOCUMENT CONTROL

JUL 12 2006

CUST. REV. 1

MtronPTI MODEL: X03082-024

ENG APPROVAL: R.olin

DATE: 7/12/06

MFG APPROVAL: [Signature]

DATE: 7/15/06

Revised: July 5, 2004

Rev. -

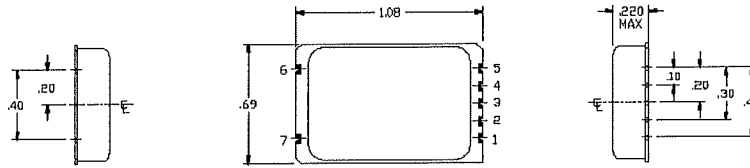
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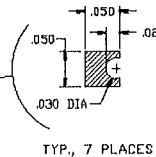
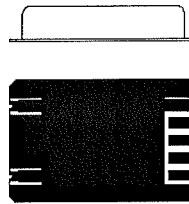
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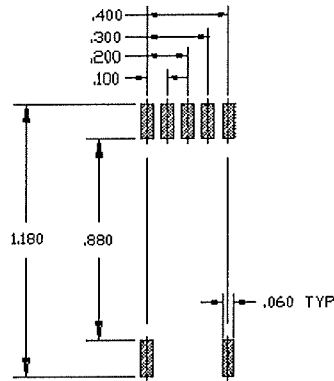
# Model XO3082-024 Temperature Compensated Crystal Oscillator



- PIN CONNECTIONS:**
1. CASE GROUND & SUPPLY RETURN
  2. SUPPLY (+)
  3. RF OUTPUT
  4. DO NOT CONNECT
  5. DO NOT CONNECT
  6. CASE GROUND
  7. CASE GROUND



**Note:** Although the XO3082 family is an SMT device, it is not a reflowable assembly compatible device. Therefore, it must be hand assembled to the PCB



### Suggested Land Pattern

Oscillator is to be soldered to lands by hand with a maximum land temp of 260°C for a maximum of 3 seconds.

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