



# Model XO3087-007 Temperature Compensated Crystal Oscillator

## Electrical Specifications

**Nominal Frequency (F<sub>0</sub>):** 50.0MHz

**Frequency Stability**

Over Temperature (with offset applied):  $\leq \pm 1.0$ ppm  
Aging per Year:  $\pm 1$ ppm

**Frequency Adjustment**

Adjustment Method: External Voltage (V<sub>C</sub>), 0 to +5V<sub>DC</sub>  
Adjustment Tuning Range:  $\pm 5$ ppm, nominal  
Slope: Negative

**Output (Sinewave)**

Level: 0dBm,  $\pm 3$ dBm  
Load: 50 $\Omega$ ,  $\pm 10\%$

**SSB Phase Noise (Typical)**

-80dBc/Hz @ 10 Hz offset  
-110dBc/Hz @ 100 Hz offset  
-138dBc/Hz @ 1 kHz offset  
-150dBc/Hz @ 10 kHz offset

**Power Supply**

Voltage: +5.0V<sub>DC</sub>  $\pm 5\%$   
Current Consumption, 3.0mA, typical

**Temperature Range**

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

MtronPTI Model: **XO3087-007**

ENG. Approval: M. McKinnon

DATE 11 / 19 / 2019

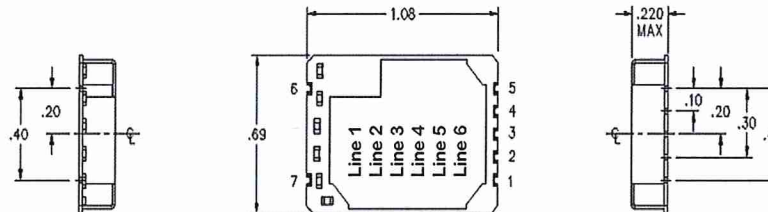
MFG. Approval: [Signature]

DATE 11 / 21 / 19

QA Approval: [Signature]

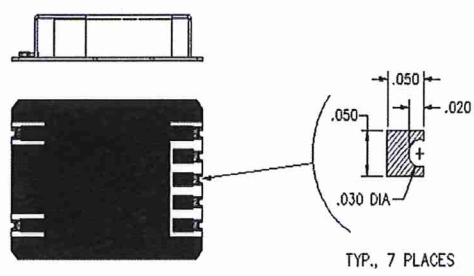
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**Note: XO3087-007 TCXO is a SMT, automated assembly and reflow compatible device. See reflow profile on page 2.**



Part Marking	
Line 1	MtronPTI
Line 2	XO3087-007
Line 3	50.000 MHz
Line 4	Offset (Hz) @ 25°C
Line 5	Serial Number
Line 6	Date Code

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

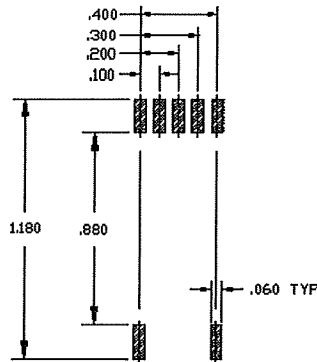


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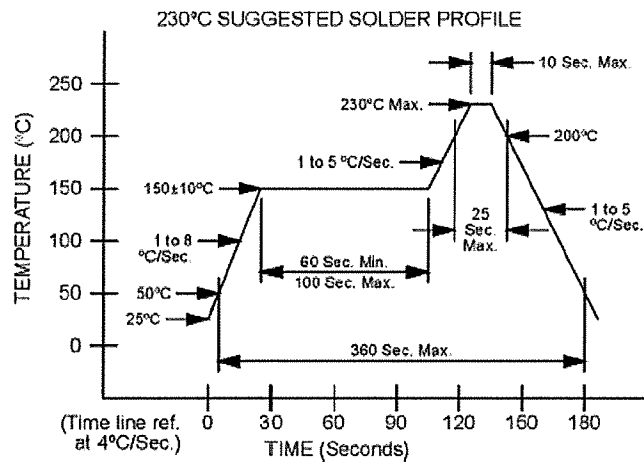


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### Suggested Land Pattern:



### Reflow Profile:



### Data Sheet Revision Table:

Date	Rev.	Orig.	Details of Revision
11-13-19	B	BRR	Phase Noise revised to Typical
10-25-19	A	BRR	Original Release

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