



# Model XO3086-005 Temperature Compensated Crystal Oscillator

## Electrical Specifications

Nominal Frequency ( $F_0$ ): 120MHz

Initial Frequency ( $V_C = +2.5V @ 25^\circ C$ ):  $\leq F_0 \pm 4.0ppm$

### Frequency Stability

Over Temperature:  $\leq \pm 1.0 ppm$

First Year Aging:  $\leq \pm 2 ppm$

10-Year Aging:  $\leq \pm 5 ppm$

### Frequency Adjustment

Method, External Voltage ( $V_C$ ),  $0V_{DC}$  to  $+5.0V_{DC}$

Range: Sufficient for 10-years aging

Slope: Negative

### Output (Sinewave)

Level:  $+3dBm \pm 3.0dB$

Load:  $50\Omega \pm 10\%$

Spurious:  $-70dBc$  maximum

### Harmonics

2<sup>nd</sup> harmonic (240MHz):  $-25dBc$  typical

All others:  $-30dBc$  maximum

### SSB Phase Noise (maximum)

$-70dBc/Hz @ 10Hz$  offset

$-105dBc/Hz @ 100Hz$  offset

$-132dBc/Hz @ 1kHz$  offset

$-150dBc/Hz @ 10kHz$  offset

### Power Supply

Voltage:  $+5.0V_{DC} \pm 5\%$

Current Consumption:  $15.0mA$  maximum

### Temperature Range

Operating:  $-55^\circ C$  to  $+85^\circ C$

Storage:  $-55^\circ C$  to  $+85^\circ C$

MtronPTI Model: **XO3086-005**

ENG. Approval: MMckunat

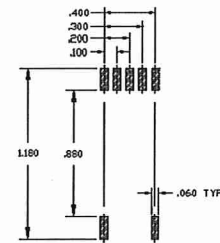
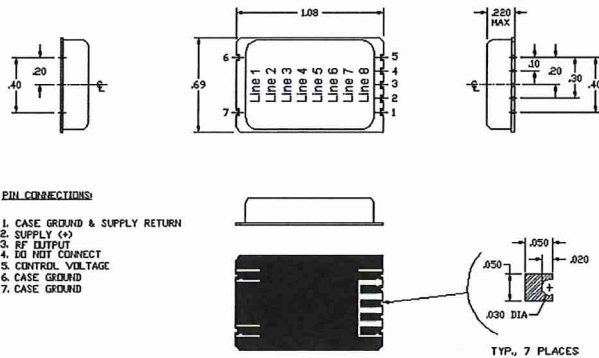
DATE 2 / 7 / 2018

MFG. Approval: GA

DATE 2 / 7 / 18

QA Approval: TJW

DATE 2 / 8 / 18



**Note:** Although the XO3086 family is an SMT device, it is not a reflow assembly compatible device. Therefore, it must be hand assembled to the PCB.

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