



# Model XO3080-147

## Temperature Compensated Crystal Oscillator

### Electrical Specifications

**Nominal Frequency ( $F_0$ ):** 50.0MHz

#### **Frequency Stability**

Over Temperature (with offset applied):  $\leq \pm 1\text{ppm}$

10-Year Aging:  $\leq \pm 3\text{ppm}$

#### **Frequency Adjustment**

Method: External Voltage ( $V_C$ ), 0 to +5.0V<sub>DC</sub>

Adjustment Tuning Range:  $\geq \pm 5\text{ppm}$

Slope: Negative

#### **Output (Sinewave)**

Level: 0dBm  $\pm 3\text{dB}$

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

#### **SSB Phase Noise (typical, under static conditions)**

-80dBc/Hz @ 10Hz offset

-110dBc/Hz @ 100Hz offset

-140dBc/Hz @ 1kHz offset

-150dBc/Hz @ 10kHz offset

#### **Sub-Harmonics:** -70dBc maximum

#### **Power Supply**

Supply Voltage ( $V_S$ ): +5.0V<sub>DC</sub>  $\pm 5\%$

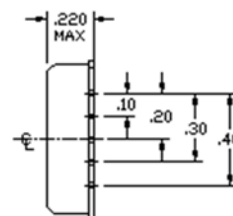
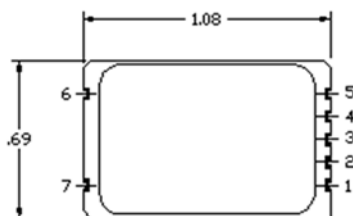
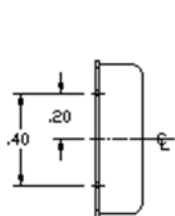
Current Consumption: 3.0mA typical

#### **Temperature Range**

Operating: -40°C to +70°C

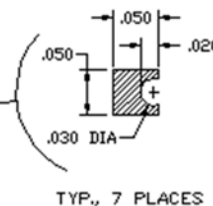
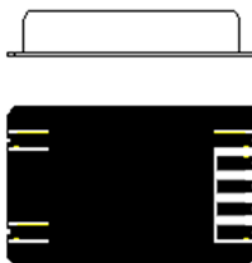
Storage: -55°C to +85°C

#### **Solderability:** Per EIAJ-STD-002



#### **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



TYP., 7 PLACES

UNLESS OTHERWISE SPECIFIED:  
DIMENSIONS ARE IN INCHES  
TOLERANCES  
DECIMALS  
.XX  $\pm$  .01  
.XXX  $\pm$  .005

Revised March 31<sup>st</sup> 2021;  
SAE -109

Rev. A

Page 1 of 2

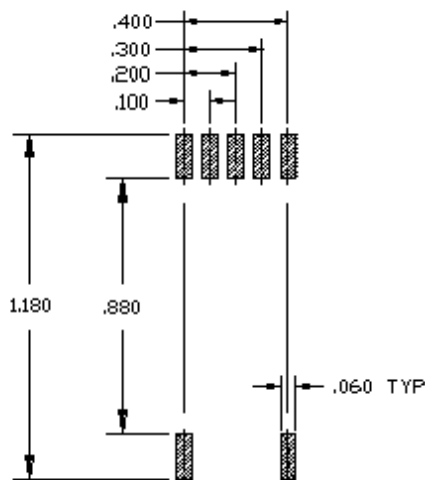
The information contained herein is proprietary to MtronPTI and is submitted in confidence.  
This information may not be copied or divulged without the express written permission of MtronPTI  
**MtronPTI, Inc. - 2525 Shader Road – Orlando – Florida – 32804-2780**  
**Telephone: 407-298-2000 Fax: 407-293-2979 E-mail: Sales@mtronpti.com**



# Model XO3080-147

## Temperature Compensated Crystal Oscillator

**Note:** Although the XO3080 family is an SMT device, it is not a reflow 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 .