

Specification for a Space Qualified Crystal Filter
 MtronPTI P/N: XF9441-001 (Engineering Model)
 MtronPTI P/N: XF9441-002 (Flight Model)

I. General & Electrical Requirements

1. Center Frequency (F_{ON}): 70MHz
2. Center Frequency Tolerance:
 - @ +25°C: $F_{ON} \pm 1.5\text{kHz}$ maximum
 - @ -15°C and +60°C: $F_{ON} \pm 3.5\text{kHz}$ maximum
3. Bandwidth:
 - @ 1dB: $F_{ON} \pm 40\text{kHz}$ minimum
 - @ 3dB: $F_{ON} \pm 52\text{kHz}$ minimum
4. Insertion Loss (at the peak of transmission): 5.0dB maximum
5. Ripple (peak-valley, over 70% of the 3dB Bandwidth): 1.0dB maximum
6. Stopband Attenuation (minimum relative to Insertion Loss):
 - 40dB: $F_{ON} \pm 125\text{kHz}$ maximum
 - 70dB: $F_{ON} \pm 500\text{kHz}$ maximum
7. Spurious Response: 45dBc minimum
8. Nominal Input Level: 0dBm
9. Weight: 25-grams maximum
10. Z_{IN}/Z_{OUT} : 50Ω

Note 1: All electrical performance specifications are to be met over the -10°C to +60°C Operating Temperature Range.

II. Environmental, Test & Physical Requirements:

1. Temperature Range
 - Operating: -15°C to +60°C
 - Storage: -40°C to +85°C
2. Package:
 - Size: Reference Figure 1
 - Mating Hardware: Reference Figure 2

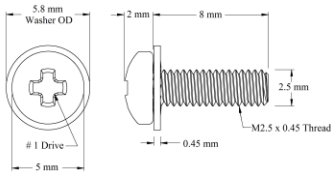


Figure 2: Mating Hardware

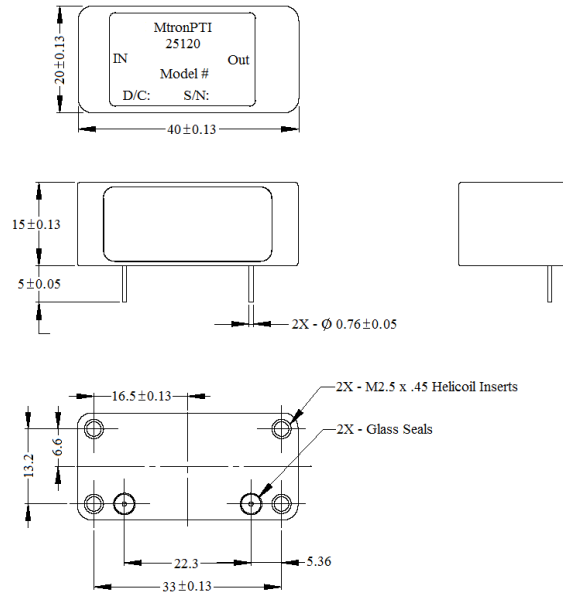


Figure 1: Package Outline Drawing

Data Sheet Revision Table:

Date	Rev.	Author	Details of Revision
04/18/13	0	BRM	Original Release.