

## Specification for an SMD 4-Pole Crystal Filter

### MtronPTI P/N: XF9407

#### I. General & Electrical Requirements

1. Center Frequency ( $F_{ON}$ ): 45.0MHz
2. Passband @ 3dB:  $F_{ON} \pm 15.0$ kHz minimum
3. Insertion Loss (@ peak of transmission, excluding the 3dB points):  $\leq 3.5$ dB
4. Passband Ripple (peak-valley):  $\leq 1.0$ dB
5. Rejection (Minimum, Relative to Insertion Loss)
  - 35dB:  $\leq F_{ON} \pm 50.0$ kHz
  - 50dB:  $\leq F_{ON} \pm 100.0$ kHz
6. Ultimate Attenuation:  $\leq -70$ dB
7. Spurious Response: 30dB minimum @  $F_{ON} + 50.0$ kHz to  $F_{ON} + 2000.0$ kHz
8.  $Z_{IN}/Z_{OUT}$ : 50Ω nominal

#### II. Environmental & Physical Requirements:

1. Temperature Range
  - Operating:  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
  - Storage:  $-65^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
2. Solderability: Per EIAJ-STD-002
3. Package (see Figure 1):
  - Seal: Non-Hermetic
  - Packaging: Tape & Reel (MOQ 100-units minimum)

MtronPTI MODEL: XF9407  
 ENG APPROVAL: MSP  
 DATE: 1/4/2013  
 MFG APPROVAL: GT  
 DATE: 1/16/13

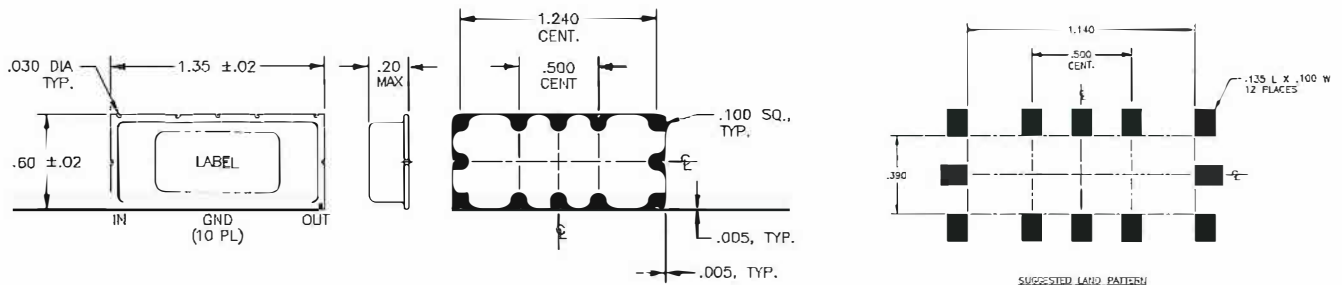


Figure 1 – Suggested Filter Package Outline & Recommended PAD Drawings

