

Specification for a Monolithic SMD Crystal Filter MtronPTI P/N: XF9430R

I. General & Electrical Requirements:

- Center Frequency (F_{ON}): 75.75MHz
- Passband:
 - @ 1dB: $\geq F_{ON} \pm 7.5\text{kHz}$
 - @ 3dB: $\geq F_{ON} \pm 10.0\text{kHz}$
- Insertion Loss (@ peak of transmission within the 3dB passband): $\leq 4.0\text{dB}$
- Passband Ripple (peak-valley): $\leq 1.0\text{dB}$
- Stopband Attenuation
 - > 45dB: $F_{ON} \pm 40.0\text{kHz}$ (absolute)
 - > 70dB: $F_{ON} \pm 910.0\text{kHz}$
- Group Delay Variation (within $F_{ON} \pm 7.5\text{kHz}$): $15\mu\text{sec}$
- Input 3rd Order Intercept Point: > +30dBm
Input Frequency: $F_{ON} \pm 50\text{kHz}$ and $F_{ON} \pm 100\text{kHz}$
Input Signal Level: -10dBm to -20dBm
- Input Signal:
Operating (full specification compliance): -5dBm nominal
Peak (No Damage): +15dBm
- Input/Output Terminating Impedance (Z_{IN}/Z_{OUT}): 50 Ω nominal

Note 1: All electrical performance specifications are valid over the full Operating Temperature Range (-30°C to +75°C) unless otherwise noted.
Note 2: All electrical performance specifications are to be validated and adjusted at the prototype build stage.

II. Environmental, Physical & Reflow Requirements:

- Temperature Range
Operating: -30°C to +75°C
Storage: -40°C to +85°C
- Solderability: Per EIAJ-STD-002
- Package: SMD (ref Figure 1)
- RoHS Compliant

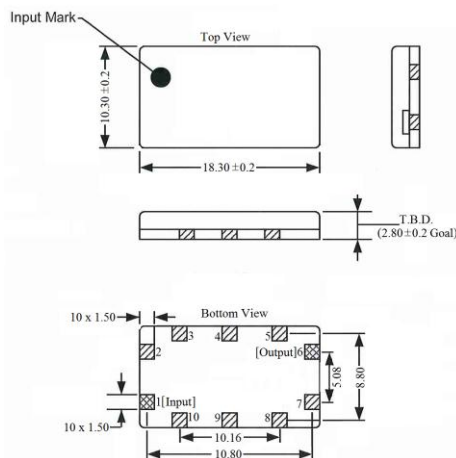


Figure 1 – Filter Package Outline Drawing

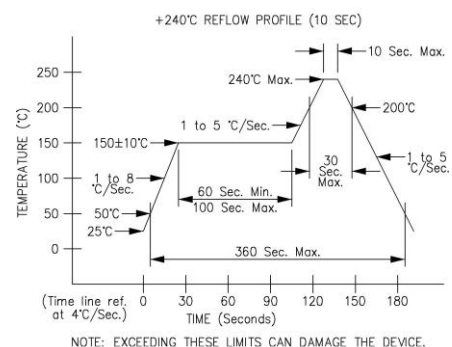


Figure 2 – Recommended Reflow Profile