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Specification for a an SMD Crystal Notch Filter MtronPTI P/N: XF9311

I. GENERAL & ELECTRICAL REQUIREMENTS

1. Notch Characteristics
 - Center Frequency (F_{ON}): 120MHz
 - Notch Bandwidth: $\geq \pm 5\text{kHz}$
 - Notch Attenuation @ F_{ON} : $\geq 50\text{dB}$
2. Passband Characteristics
 - Lower Passband: $F_{ON} - 20\text{MHz}$ to $F_{ON} - 1\text{MHz}$
 - Upper Passband: $F_{ON} + 1\text{MHz}$ to $F_{ON} + 20\text{MHz}$
 - Passband Insertion Loss: $\leq 3.5\text{dB}$
 - Passband Ripple: $\leq 1.0\text{dB}$
3. Spurious Responses
 - From $F_{ON} \pm 20\text{kHz}$ to $F_{ON} \pm 150\text{kHz}$: $\leq 25\text{dB}$
 - From $F_{ON} \pm 150\text{kHz}$ to $F_{ON} \pm 350\text{kHz}$: $\leq 20\text{dB}$
 - From $F_{ON} \pm 350\text{kHz}$ to $F_{ON} \pm 1\text{MHz}$: $\leq 10\text{dB}$
4. Maximum Input Power
 - @ F_{ON} : $\leq 10\text{mW}$
 - Within the Passband: $\leq 1\text{mW}$
5. Terminating Impedance (Z_s/Z_L): 50Ω nominal

Note 1: No Pure Tin components are to be utilized in the construction of this filter.

II. ENVIRONMENTAL & PHYSICAL REQUIREMENTS:

1. Temperature Range
 - Operating (full specification compliance): -20°C to $+70^\circ\text{C}$
 - Functional (possible specification non-compliance): -30°C to $+80^\circ\text{C}$
 - Storage: -40°C to $+90^\circ\text{C}$
2. Package: 1.500" (L) x 0.500" (W) x 0.500" (H), 4-pin PCB mount (grounds) and SMA Connectorized