

2525 Shader Road Orlando Florida 32804 USA Phone: 407-298-2000 Fax: 407-293-2979 Website: www.mtronpti.com AMEX: LGL

## Specification for an SMD LC Filter MtronPTI P/N: LF9395

## I. General & Electrical Requirements

- 1. Center Frequency (F<sub>ON</sub>): 45.0MHz ±0.5MHz
- 2. Passband @ 3dB:  $\leq$  F<sub>ON</sub>  $\pm$ 3.75MHz
- 3. Insertion Loss (@ $F_{ON}$ ):  $\leq 2dB$
- 4. Insertion Loss Ripple (peak-valley,  $F_{ON} \pm 2.0 MHz$ ):  $\leq 0.2 dB$
- 5. Input/Output VSWR (Ref to  $50\Omega$ , over  $F_{ON} \pm 2.0 MHz$ ):  $\leq 1.5:1$
- 6. Phase Offset @  $F_{ON}$  and @  $25^{\circ}C$ :  $\leq \pm 7^{\circ}$
- 7. Phase Tracking  $F_{ON} \pm 1.5 MHz$ :  $\leq \pm 4^{\circ}$ , after subtraction of  $\pm 7^{\circ}$  (max) Phase Offset at  $F_{ON} \otimes 25^{\circ}C$
- 8. Amplitude Offset @  $F_{ON}$  and @  $25^{\circ}C$ :  $\leq \pm 0.5 dB$
- 9. Amplitude Tracking F<sub>ON</sub> ±1.5MHz: ≤ ±0.5dB, after subtraction of ±0.5dB (max) Amplitude Offset at F<sub>ON</sub> @ 25°C
- 10. Rejection (Minimum, Relative to Insertion Loss) (all to be validated at prototype build)

90dBc: 0Hz to 5MHz 60dBc: 5MHz to 15MHz 60dBc: 130MHz to 360MHz 90dBc: 360MHz to 1000MHz

11. Signal Level: +20dBm (CW) with a 2:1 load

12.  $Z_S/Z_L$ : 50 $\Omega$  nominal

## II. Environmental & Physical Requirements:

1. Temperature Range

Operating: -40°C to +71°C Storage: -65°C to +150°C

- 2. Solderability: Per EIAJ-STD-002
- 3. Package (see Figure 1):

Size: 1.00" (L) x 0.375" (W) x 0.3" (H) (1.25" max length id 4-pole is required)

Seal: Hermetic, laser sealed

Finish: Nickel Plated Body, Sn63Pb37 (or equivalent) tinned terminals

4. Delivery shall be a matched set of 6-filters

Part markings shall identify sets.

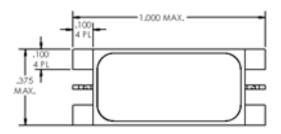
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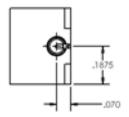


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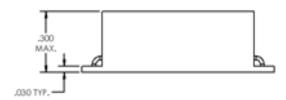


Figure 1 – Suggested Filter Package Outline Drawing

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