

Description

Benchmark Lark Technology presents its advanced series of millimeter wave stripline broadband bandpass filters, designed for the demanding specifications of 5 GHz to 40 GHz applications. Utilizing a sophisticated blend of high-performance soft thermoplastic and durable thermoset materials, these filters achieve an optimal balance between electrical efficiency and mechanical robustness, tailored for varying temperature conditions. With their SWaP-optimized design, these filters are perfect for critical size reduction needs in Ka/Ku band aerospace/satcom/defense sectors, and mmWave infrastructure.



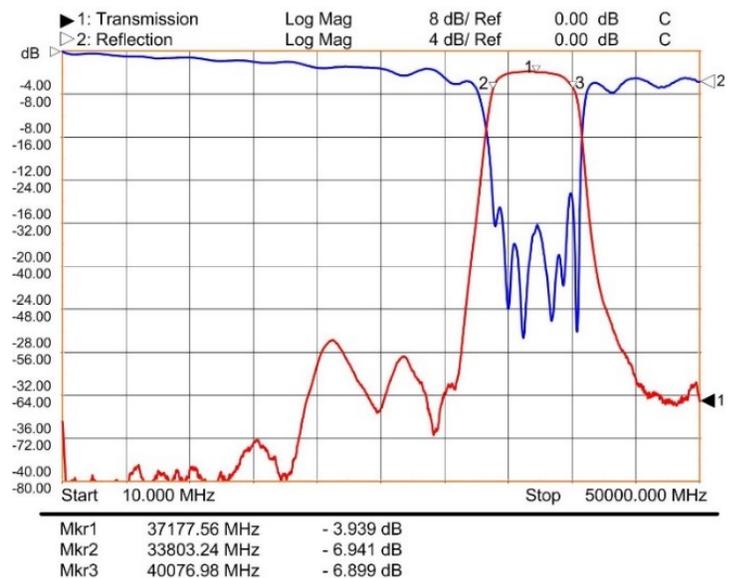
Features

- Compact and light weight
- Easily stacked and surface mounted
- Customized passbands and bandwidths
- Low dissipation factor and low moisture absorption

Specifications

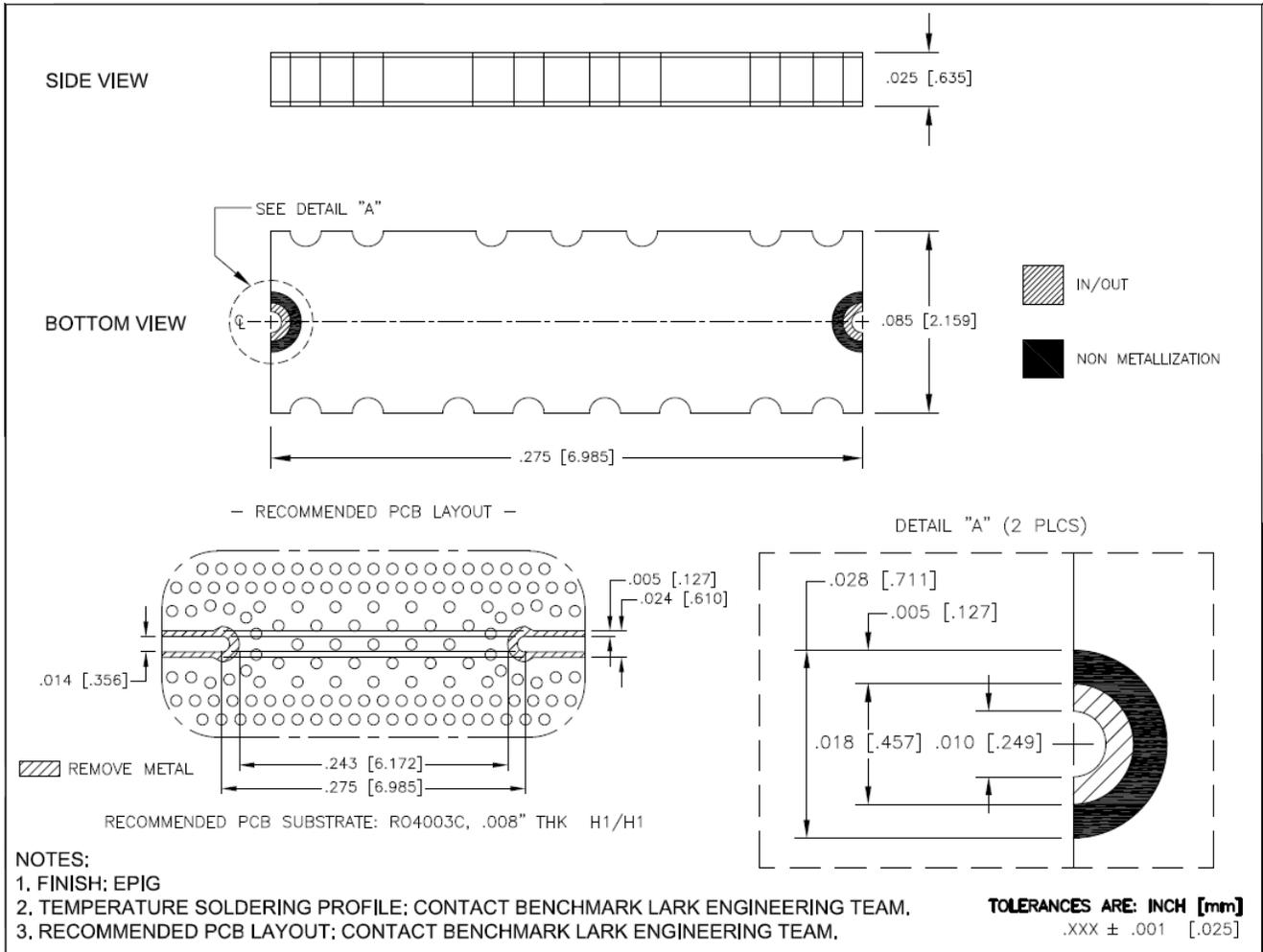
- **Impedance:** 50 Ohms
- **Center frequency:** 37000 MHz
- **Passband:** 3000 MHz
- **Insertion loss:** < 5 dB @ Fo
- **VSWR:** 2.09:1 Max.
- **Rejection:** 40dB @ 32000 MHz & 42000 MHz
- **Operating temperature:** -40 °C to 85 °C
- **Non-operating temperature:** -65 °C to 125 °C
- $\Delta F/\Delta T \sim 0.53$ MHz/°C
- **Humidity:** 95% R.H.
- **Dimensions (L x W x H):** 0.275 x 0.085 x 0.025 in.
(6.985 x 2.032 x 0.635 mm)

Typical Measured Performance



Typical de-embedded measured result at room temperature. The filter is measured on a Rogers RO4003C® 0.008" substrate test board with 50 Ohms CPW traces.

Mechanical Specifications



The specifications and data provided are subject to change. We continuously strive to improve our products and may update information without notice. For the latest details, please visit our website regularly.