

8.5 GHz Surface Mount Bandpass Filter

B081RC0S Preliminary

DESCRIPTION

One of DLI's surface mountable catalog bandpass filters designed for the 5G band. This filter utilizes DLI's low loss temperature stable materials which offer small size and minimal performance variation over temperature. The catalog BPF's are offered in a variety of frequency bands, which offers a drop in solution with highly repeatable performance.

FEATURES

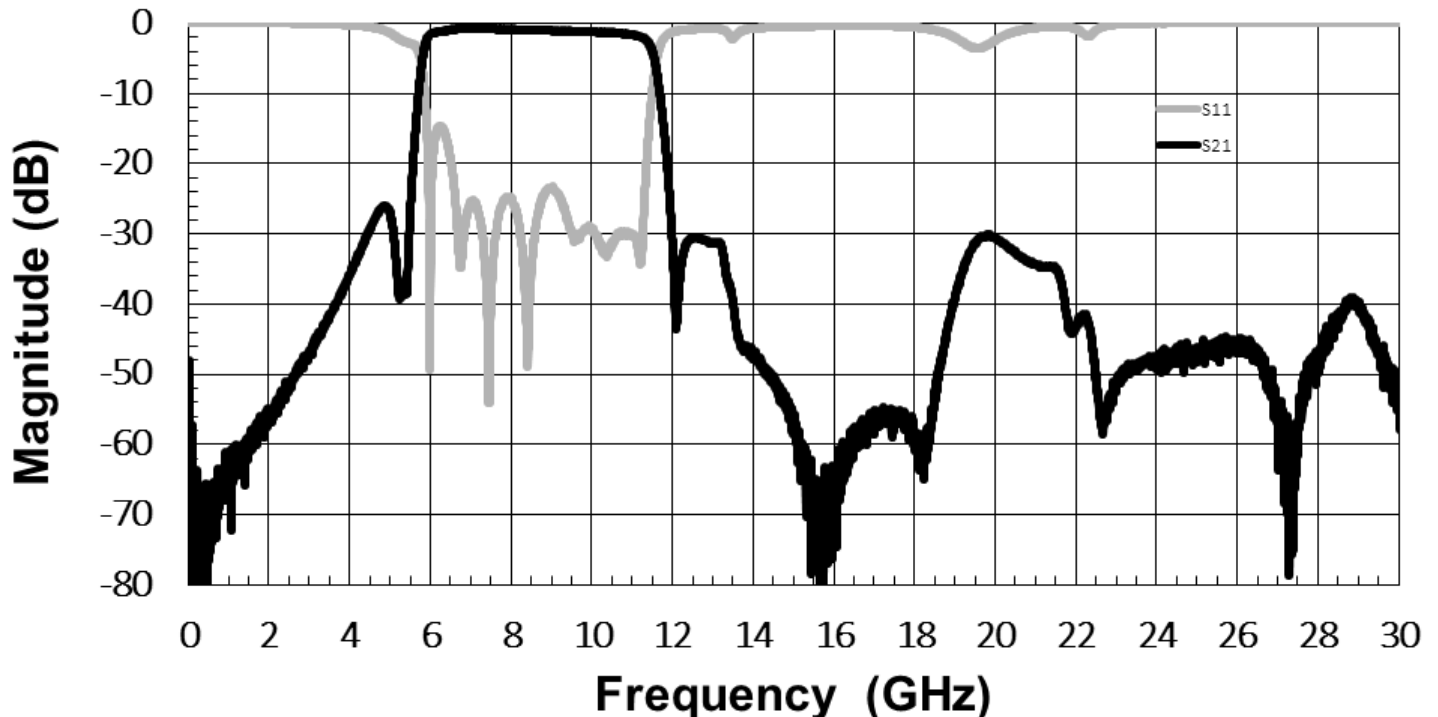
- Small Size
- Fully Shielded Component
- Solder Surface Mount Package
- Moisture Sensitivity Level: MSL1
- Frequency Stable over Temperature
- Operating & Storage Temp: -55°C to +125°C
- Characteristic Impedance: 50Ω

SPECIFICATIONS*

| Parameter | Frequency Range (GHz) | Min | Typ. | Max |
|--------------------------|---|-----|------|-----|
| Insertion Loss (dB) | 6 - 11 | | 3.4 | 3.9 |
| Return Loss (dB) | | 9.5 | 13 | 15 |
| Low Side Rejection (dB) | DC - 3.5 | 23 | 40 | |
| High Side Rejection (dB) | 14 - 19 | 28 | 40 | |
| Input Power (W) | | | | TBD |
| Size (L x W x H) | 0.190 x 0.100 x 0.090 in 4.83 x 2.54 x 2.29 mm | | | |

*Electrical specifications based on typical probed performance at room temperature. Insertion loss shall vary ± 0.5 dB over temperature.

Typical Preliminary Simulated Performance

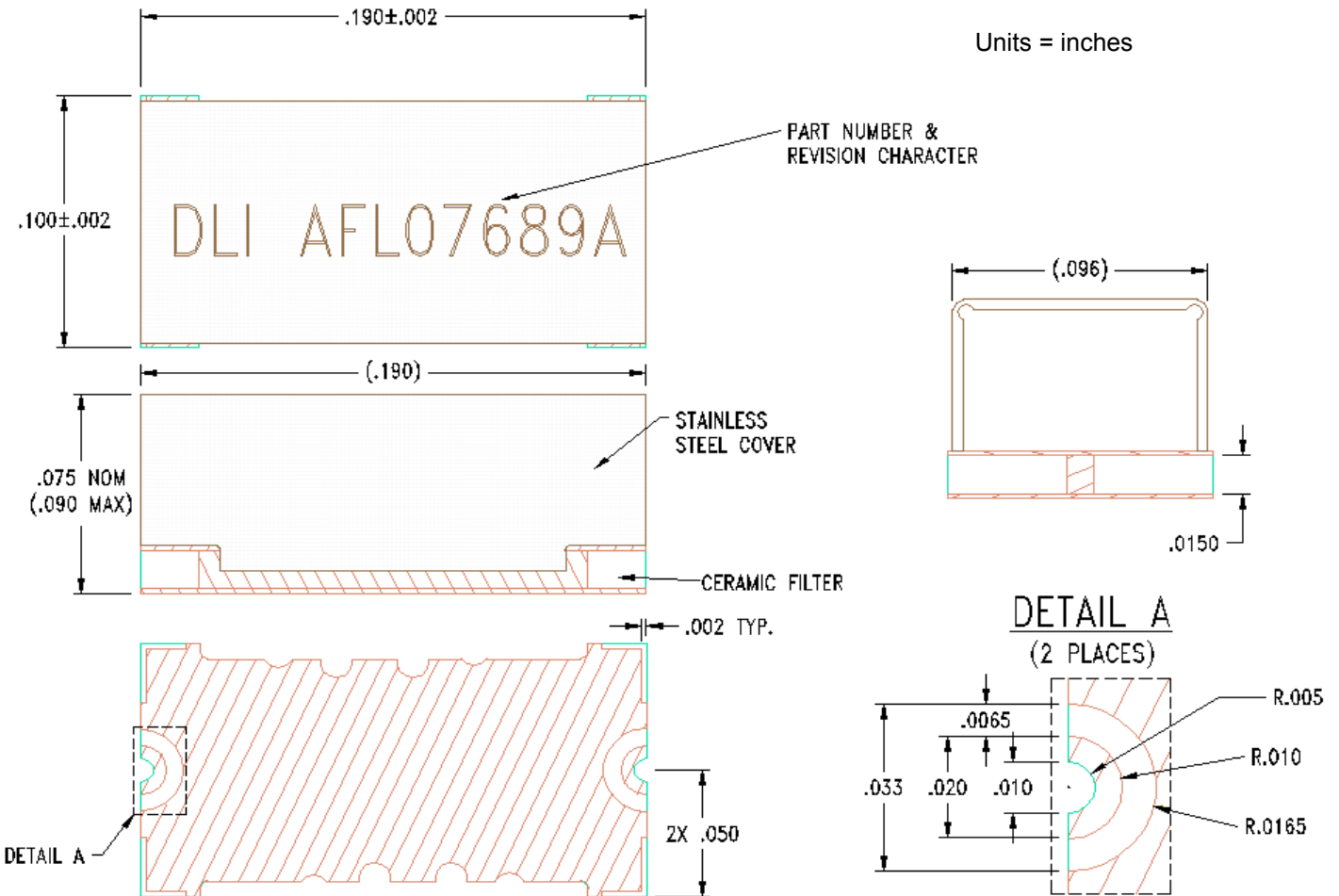


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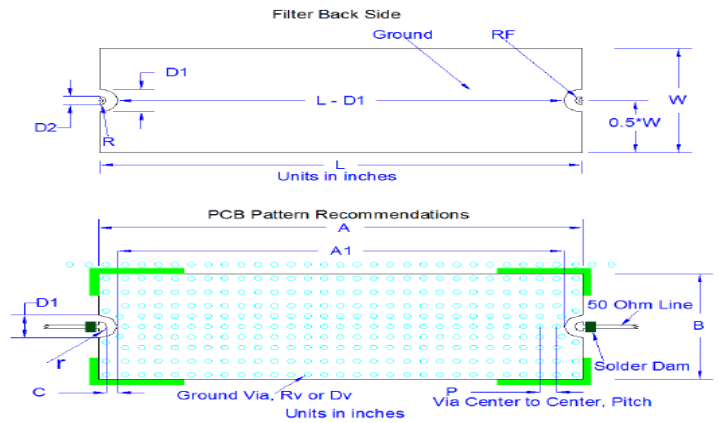
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Physical Dimensions

Units = inches



Recommended PCB Layout



- 50Ω trace dimensions are application specific.
- Ensure adequate grounding beneath the part.

| L | W | D1 | D2 | R | r | A | A1 | B | C |
|------|------|-------|------|--------|---|---------|--------|---------|--------|
| 0.19 | 0.10 | 0.033 | 0.02 | 0.5*D2 | R | L+0.002 | L - D1 | W+0.002 | 0.0065 |

