

(nowles Precision Devices brand

### 10.6 GHz Surface Mount Bandpass Filter



#### **B105MB5S**

www.knowlescapacitors.com

#### DESCRIPTION

SPECIFICATIONS\*

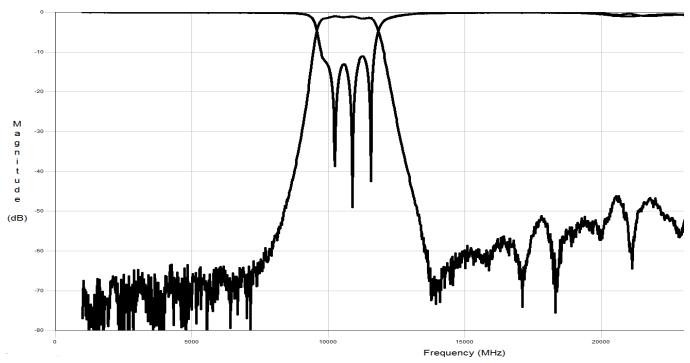
One of DLI's surface mountable catalog bandpass filters . This filter utilizes DLI's low loss temperature stable materials which offer small size and minimal performance variation over temperature. The catalog BPF's are offered in a variety of frequency bands, which offers a drop in solution with highly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

| Parameter                | Frequency<br>Range (GHz)                         | Min | Тур. | Max |
|--------------------------|--|-----|------|-----|
| Insertion Loss (dB)      | 10.0 - 11.2                                      | -   | 1.75 | 2.0 |
| Return Loss (dB)         |  | 10  | 12   | -   |
| Low Side Rejection (dB)  | DC - 8.0   | 45  | 50   | -   |
| High Side Rejection (dB) | 13.0 - 23.5                                      | 40  | 50   |     |
| Input Power (W)          |  |     |      | TBD |
| Size (L x W x H)         | 0.450 x 0.200x 0.103 in<br>11.43 x 5.0 x 2.61 mm |     |      |     |

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



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## **Typical Measured Performance**



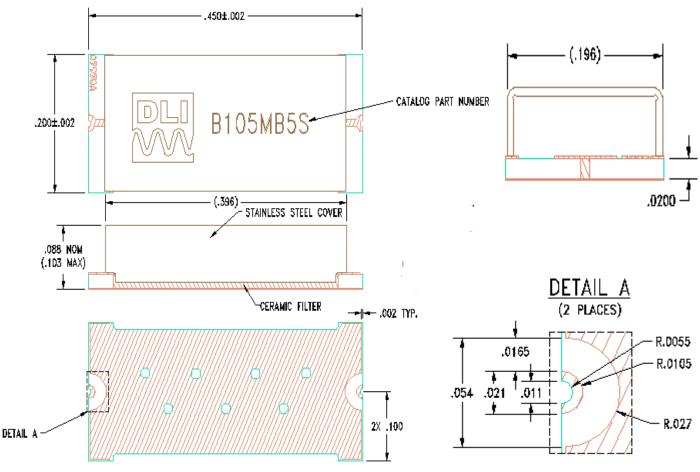
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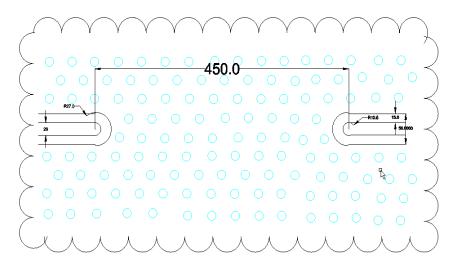
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# **Physical Dimensions**

Units = inches



## **Recommended PCB Layout**



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



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