**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**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Frequency Range (GHz)</th>
<th>Min</th>
<th>Typ.</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion Loss (dB)</td>
<td>26.5 to 29.5</td>
<td>3.25</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>Return Loss (dB)</td>
<td></td>
<td>10</td>
<td>12</td>
<td></td>
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<tr>
<td>Low Side Rejection (dB)</td>
<td>DC - 24.0</td>
<td>30</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>High Side Rejection (dB)</td>
<td>31.0 – 39.0</td>
<td>30</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Input Power (W)</td>
<td></td>
<td></td>
<td>TBD</td>
<td></td>
</tr>
<tr>
<td>Size (L x W x H)</td>
<td>0.450 x 0.110 x 0.089in</td>
<td>11.43 x 2.794 x 2.26 mm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

**Typical Measured Performance**

![Graph showing typical measured performance](image-url)
28.0 GHz Surface Mount Band pass Filter
B280MB1S

Physical Dimensions

Units = inches (in)

- 0.450 ± 0.002
- 0.110 ± 0.002
- (0.370)
- (0.088)
- 0.062 TYP.
- 2X .055
- .017
- .054
- .021
- .010
- 0.027

Recommended PCB Layout

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