### DESCRIPTION

One of DLI’s surface mountable catalog band pass 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

### 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>3.4 - 4.2</td>
<td>-</td>
<td>2.0</td>
<td>2.25</td>
</tr>
<tr>
<td>Return Loss (dB)</td>
<td></td>
<td>10</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Low Side Rejection (dB)</td>
<td>DC – 2.9</td>
<td>40</td>
<td>45</td>
<td>-</td>
</tr>
<tr>
<td>High Side Rejection (dB)</td>
<td>4.7 - 9.0</td>
<td>40</td>
<td>45</td>
<td>-</td>
</tr>
<tr>
<td>Input Power (W)</td>
<td></td>
<td></td>
<td></td>
<td>TBD</td>
</tr>
<tr>
<td>Size (L x W x H)</td>
<td>0.550 x 0.220 x 0.108 in</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13.97 x 5.588 x 2.743 mm</td>
<td></td>
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</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)
3.8 GHz Surface Mount Band pass Filter
B038NC4S

Physical Dimensions

Units = inches

Catalog Number: B038NC4S

Physical Dimensions:
- .550 ± .002
- .220 ± .002
- .098 Nom (.108 MAX)
- .030

Recommended PCB Layout

2777 Route 20 East, Cazenovia, NY 13035 | Ph.: (315)655-8710 | KCCSales@knowles.com

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