

## 38.5 GHz Surface Mount Bandpass Filter

**B385MD0S**

### 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

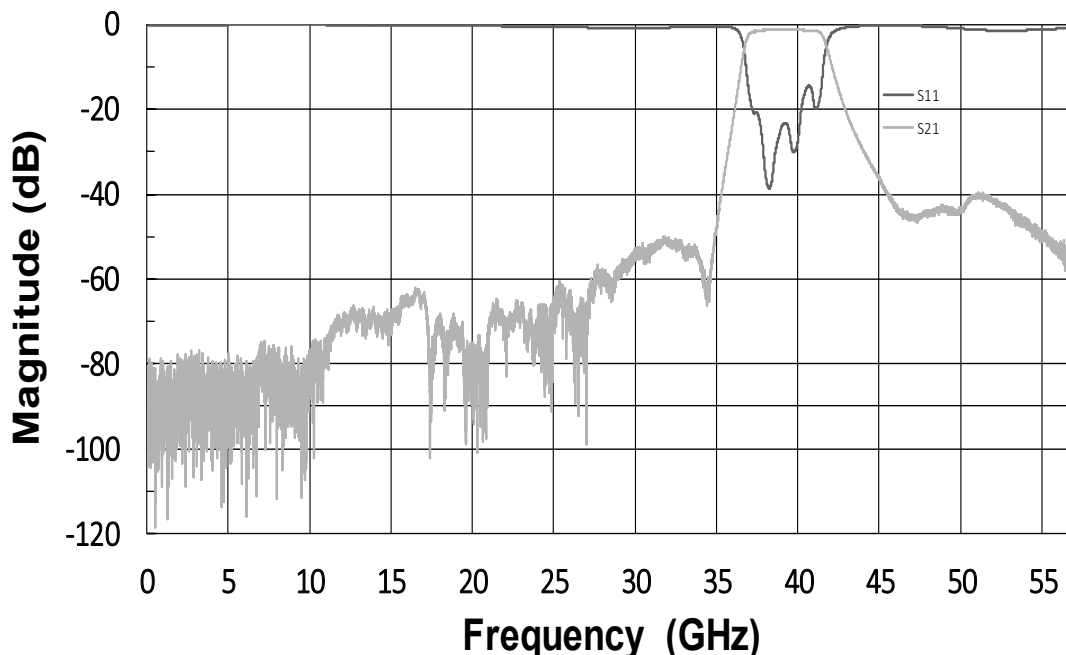
- Small Size
- Fully Shielded Component
- Solder Surface Mount Package
- Moisture Sensitivity Level: MSL1
- Frequency Stable over Temperature
- Operating & Storage Temp: -55°C to +125°C
- Characteristic Impedance: 50Ω

### SPECIFICATIONS\*

Parameter	Frequency Range (GHz)	Min	Typ.	Max
Insertion Loss (dB)	37.0 - 40.0		2.5	2.75
Return Loss (dB)		9.5	10	15
Low Side Rejection (dB)	DC - 34.0	30	40	
High Side Rejection (dB)	45.0 - 50.0	30	40	
Input Power (W)				TBD
Size (L x W x H)	0.275 x 0.080 x 0.075in 6.985 x 2.032 x 1.905 mm			

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

### Typical Measured Performance

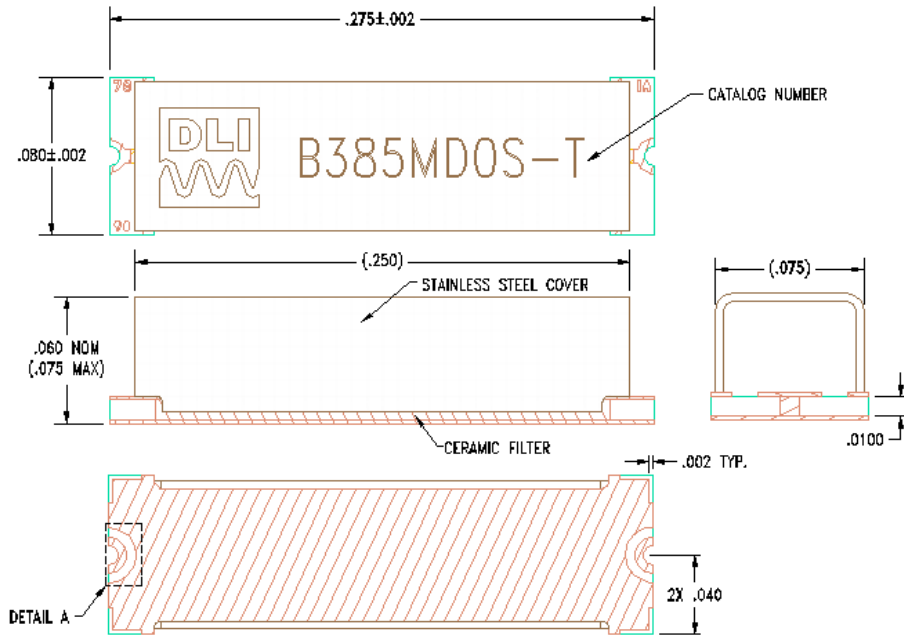


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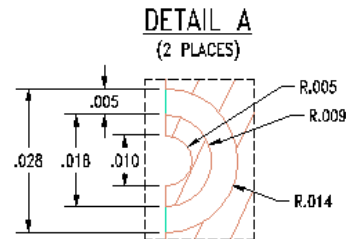
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**Physical Dimensions**

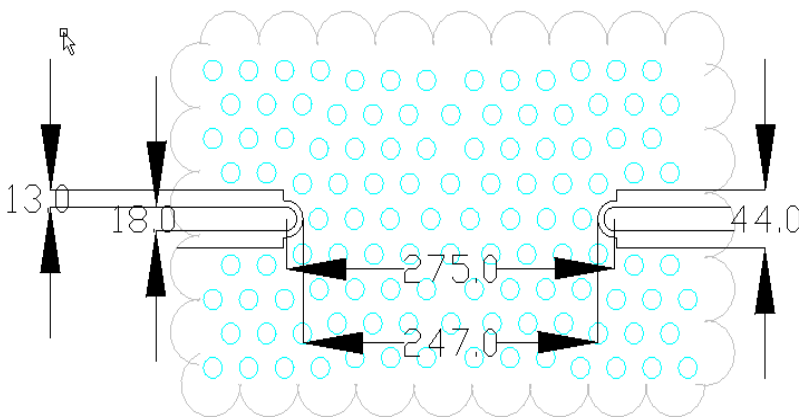
Units = inches



- \*NOTES:**
1. MOUNTING SURFACE METALLIZATION:  
3-6 μINCHES Au OVER  
50 μINCHES MIN. Ni OVER  
100 μINCHES MIN. Au OVER  
300 Å MIN. TiW
  2. COVER MATERIAL:  
ANNEALED, 430 STAINLESS STEEL
  3. COVER METALLIZATION:  
5-15 μINCHES Au OVER  
50-100 μINCHES Ni
  4. ASSEMBLY WILL BE LASER MARKED AS SHOWN.
  5. MAXIMUM ASSEMBLY PROCESS TEMPERATURE: 250°C



**Recommended PCB Layout**



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

