

a Knowles Precision Devices brand

## 28.0 GHz Surface Mount Bandpass Filter



**B280MC1S** 

#### COMPEX • DLI • JOHANSON MFG NOVACAP • SYFER • VOLTRONICS WWW.knowlescapacitors.com

### DESCRIPTION

## SPECIFICATIONS\*

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

### Packaging and Ordering information:

To request tape and reel packaging, please order part number B280MC1S-T

Parameter	Frequency Range (GHz)	Min	Тур.	Max
Insertion Loss (dB)	26.5 - 29.5	_	3.5	4.0
Return Loss (dB)		10	15	—
Low Side Rejection (dB)	DC - 6.0 6.0 - 20.0 20.0 - 25.0 25.0 - 25.5	50 40 30 20	55 45 30 20	
High Side Rejection (dB)	30.5 - 31.5 31.50 - 37.0 37.0– 41.0	25.0 35 30	27.5 40 35	
Size (L x W x H)	0.216 x 0.090 x 0.064 in 5.5 x 2.3 x 1.8 mm			

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

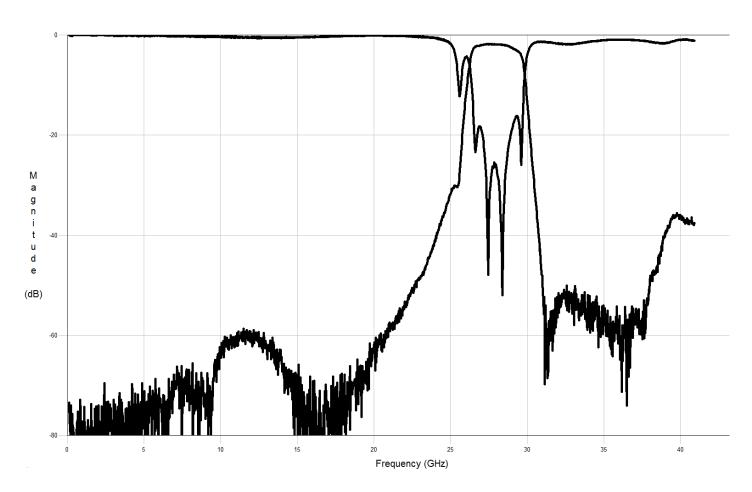


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# **RF Measured Performance**





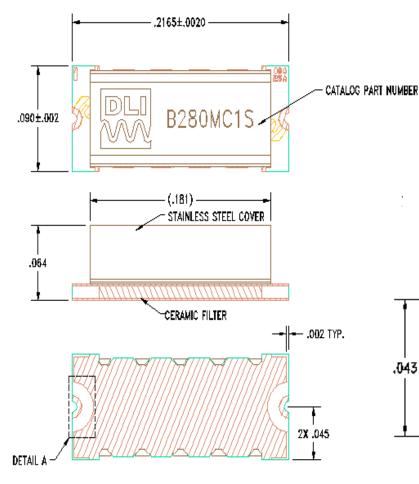
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## **Physical Dimensions**

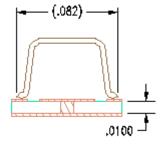


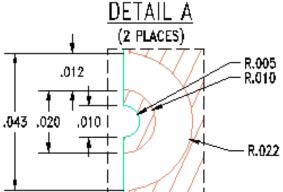
Units = inches (in)



NOTES:

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





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





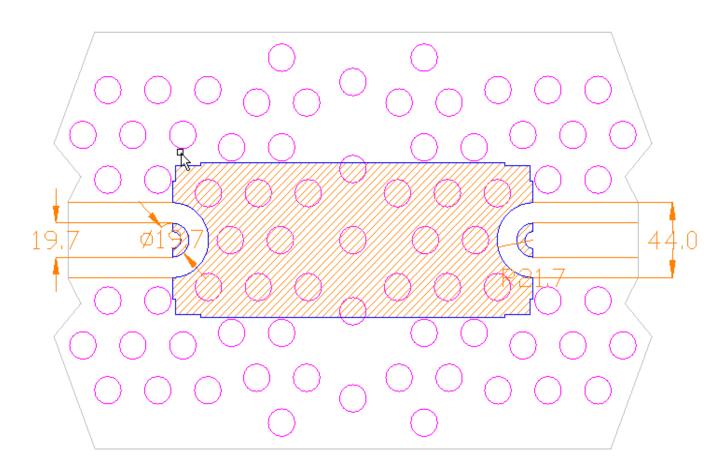
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## **PCB Pattern Recommendations**

Unit : mil



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