

2 - 18 GHz Band Pass Filter

B100MH0W

DESCRIPTION

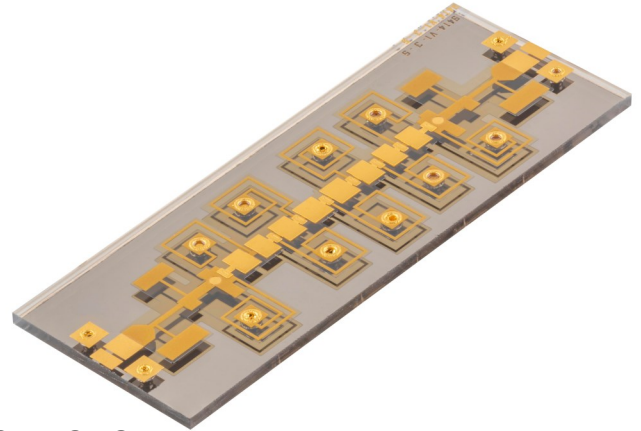
DLI introduces a wide band, wire-bondable (WB) catalog filter. This filter utilizes Knowles' unique multilayer filter technology to enable compact wideband performance.

FEATURES

- Small Size
- Wirebond configuration
- Excellent Repeatability
- Moisture Sensitivity Level: MSL1
- Operating & Storage Temp: -40°C to +125°C
- Characteristic Impedance: 50Ω

Packaging and Ordering information:

To request tape and reel packaging, please order part number **B100MH0W-T**



SPECIFICATIONS*

Parameter	Frequency Range (GHz)	Min*	Typ.	Max*
Insertion Loss (dB)	2.0 - 3.0	—	2	3.5
	3.0—18.0	—	0.7	1.75
Return Loss (dB)	2.0—18.0	8	15	—
Low Side Rejection (dB)	DC - 0.80	60	75	—
	0.80 - 0.90	40	48	—
High Side Rejection (dB)	22.0 - 29.0	25	35	—
	29.0 - 35.0	15	25	—
CW Input Power (W) **				5
$\theta_{jc} \left(\frac{^{\circ}C}{W} \right)$			15	
Size (L x W x H)	0.420 x 0.160 x 0.010 inch 9.4 x 4.0 x 0.25 mm			

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

** Power rating assumes the component will be mounted to a PCB with good thermally conducting ground via's as outlined in the recommended PCB layout that are connected to an adequate heat sink. Max power is based on 125°C base temperature.

Information in this document is for informational and guideline purposes only. All information regarding the Product described in this datasheet is subject to change from time to time at Knowles Precision Devices' sole discretion. It is the customer's sole responsibility to evaluate the suitability of the Product in the customer's particular application. Knowles Precision Devices assumes no responsibility or liability for the use of the information contained within.

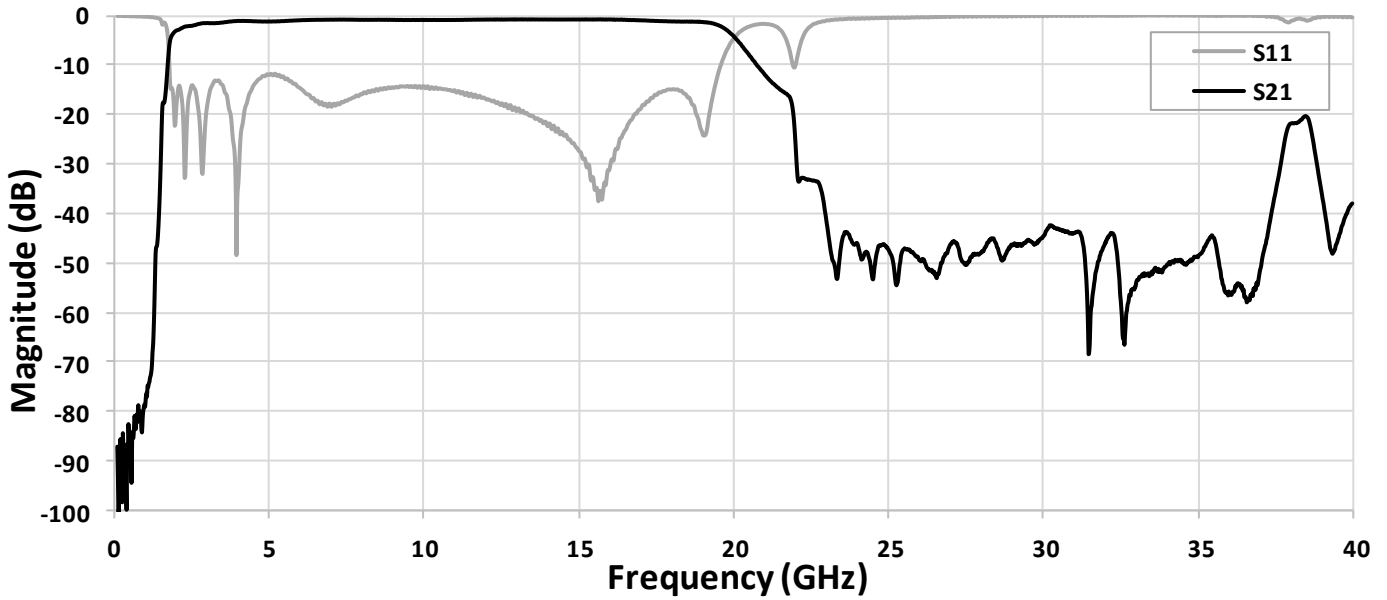
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To Order Contact KCCSales@knowles.com | For Technical Inquiries Contact DLIengineering@knowles.com

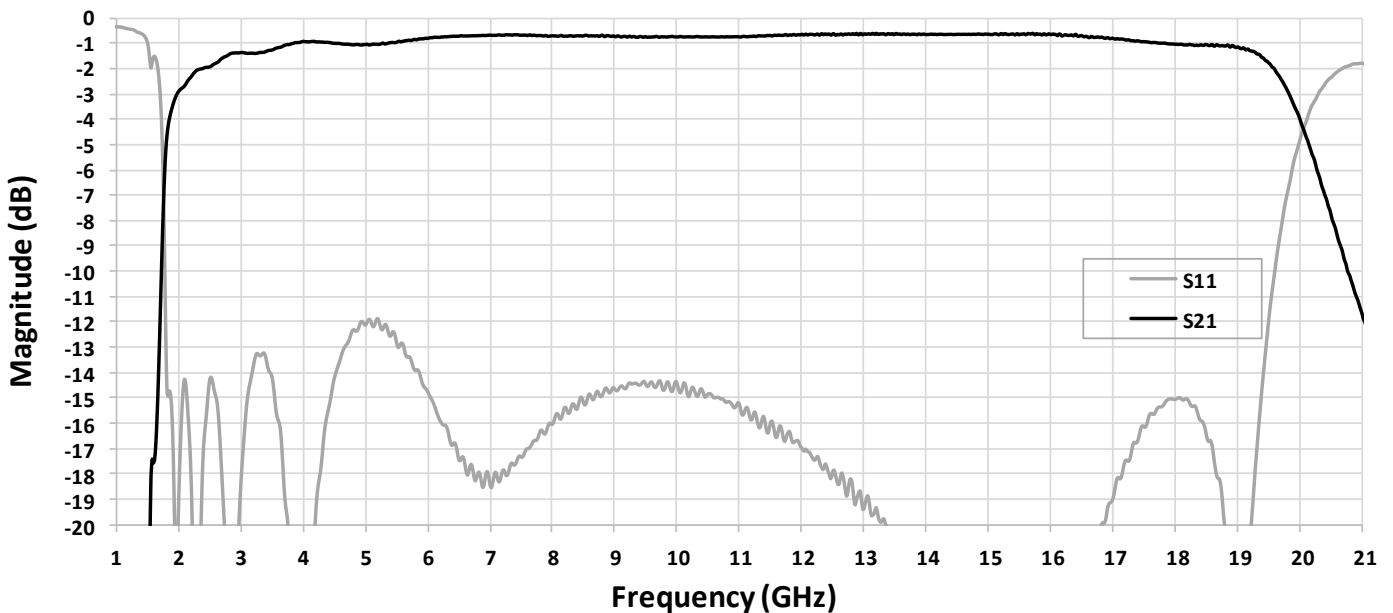
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Typical Measured Data



Wideband Performance



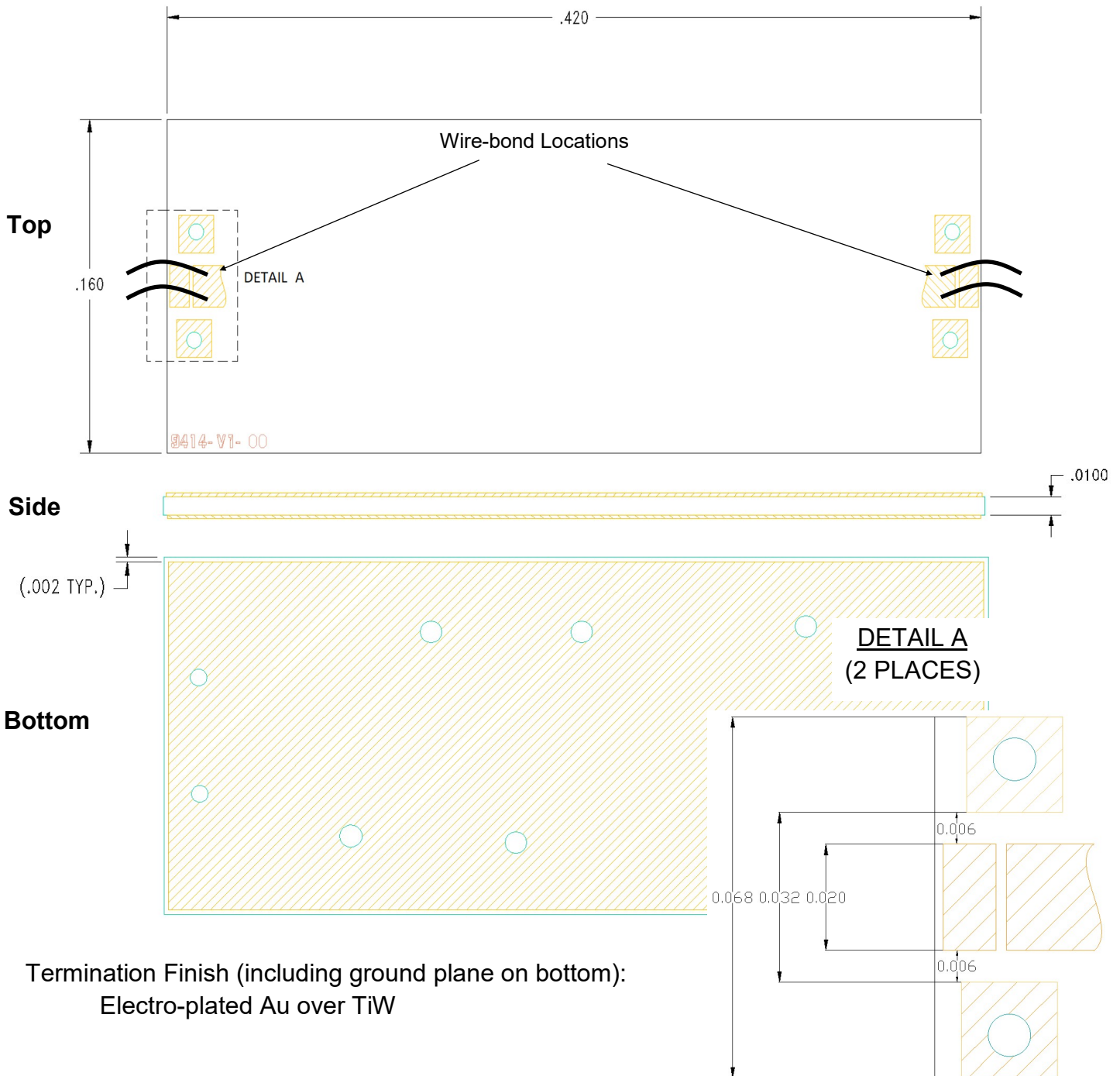
Narrowband Performance

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Physical Dimensions

Units = inches (in)



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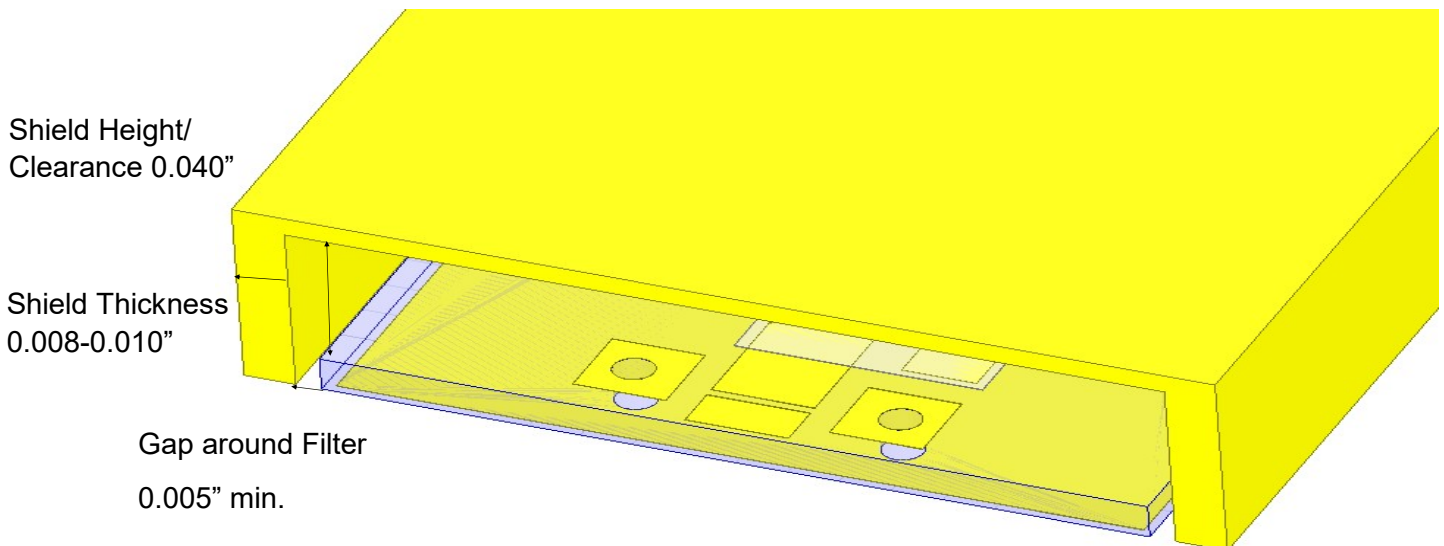
Application Notes

This wire-bonded filter is attached to a flat metallized surface to provide grounding. If additional shielding is needed in the application, shielding may be added around the filter as specified below:

- **Shield material:** Gold-plated Brass, Steel, Aluminum or conductive metal
- **Minimum shield material thickness:** 0.008 inches
- **Shield height/clearance:** 0.040 inches
- **Space required around filter:** 0.005 inch

Recommended material for attachment of the filter to the housing:

- Loctite Ablestik 5025E conductive epoxy



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