3.6GHz Bandpass Filter

Data Sheet BP036BW02S

FEATURES

- Low Insertion Loss
- Extreme out of band rejection to +18 GHz
- Common footprint up to 10GHz
- Customizable to other frequencies and bandwidths
- Wafer level process (low manufacturing cost)
- Extremely stable over temperature
- Characteristic Impedance: 50Ω
- -55˚C to +125˚C
- Moisture Sensitivity Level: MSL2A
- Surface Mount BGA Package

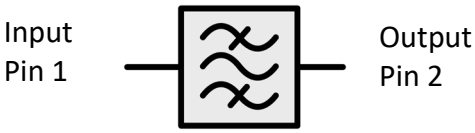
APPLICATIONS

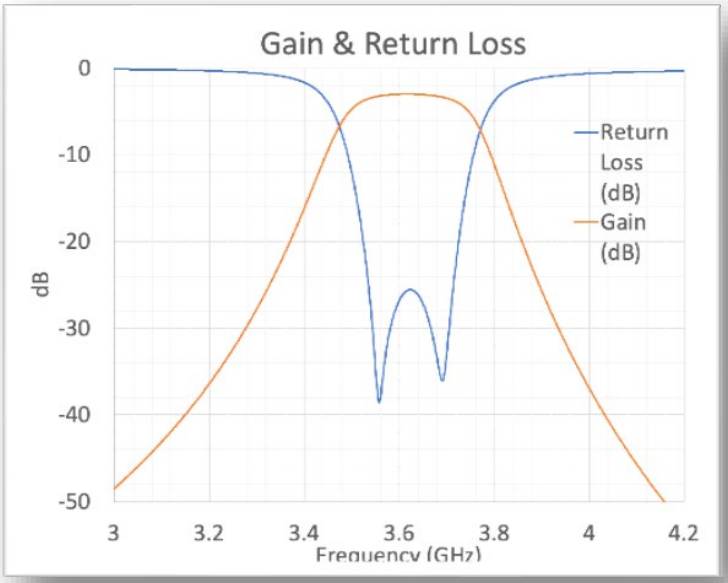
- CBRS devices
- Sub-6GHz 5G Radio
- Radar, EW and defense
- General purpose wireless
- Roofing Filter, complementary to BAW/SAW

GENERAL DESCRIPTION

ED2's CBRS Bandpass Filter is a fused silica (glass) high-performance, low cost, BGA-type surface mount component. The filter typically has a 3.7 dB insertion loss over a 278 MHz bandwidth. The filter's excellent rejection makes it a perfect roofing filter in complement to SAW/BAW applications. Filter was specifically designed for n48 CBRS operating band applications. This small size filter has minimal variation in performance and is also highly repeatable from filter to filter. The filter is a RoHS-compliant industry-standard device.

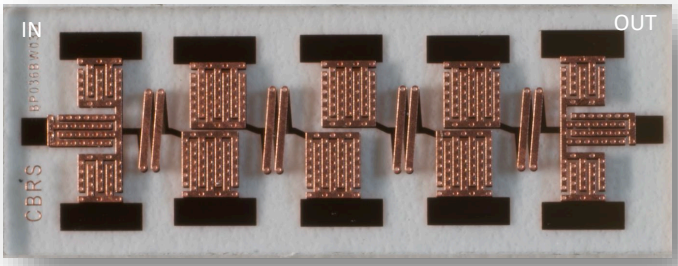
FUNCTIONAL BLOCK DIAGRAM



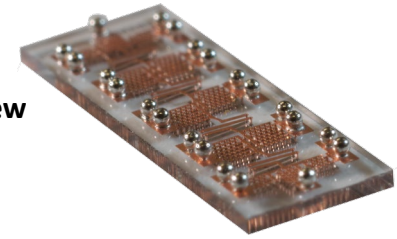


Parameter	Frequency Range (GHz)	Min	Typ. (actual)	Max
Insertion Loss (dB)	3.55 – 3.7		3.7	4.5
VSWR (1dB BW)			1.5	2.0
Low Side Rejection (dB)	DC- 3 GHz	-45	-52	
High Side Rejection (dB)	4.2GHz – 18Ghz	-45	-60	
Input Power(dBm)				+40
Size (L x W x H)	0.327 x 0.110 x 0.028 in 8.3 x 2.8 x 0.71 mm			

Top View



Isometric View



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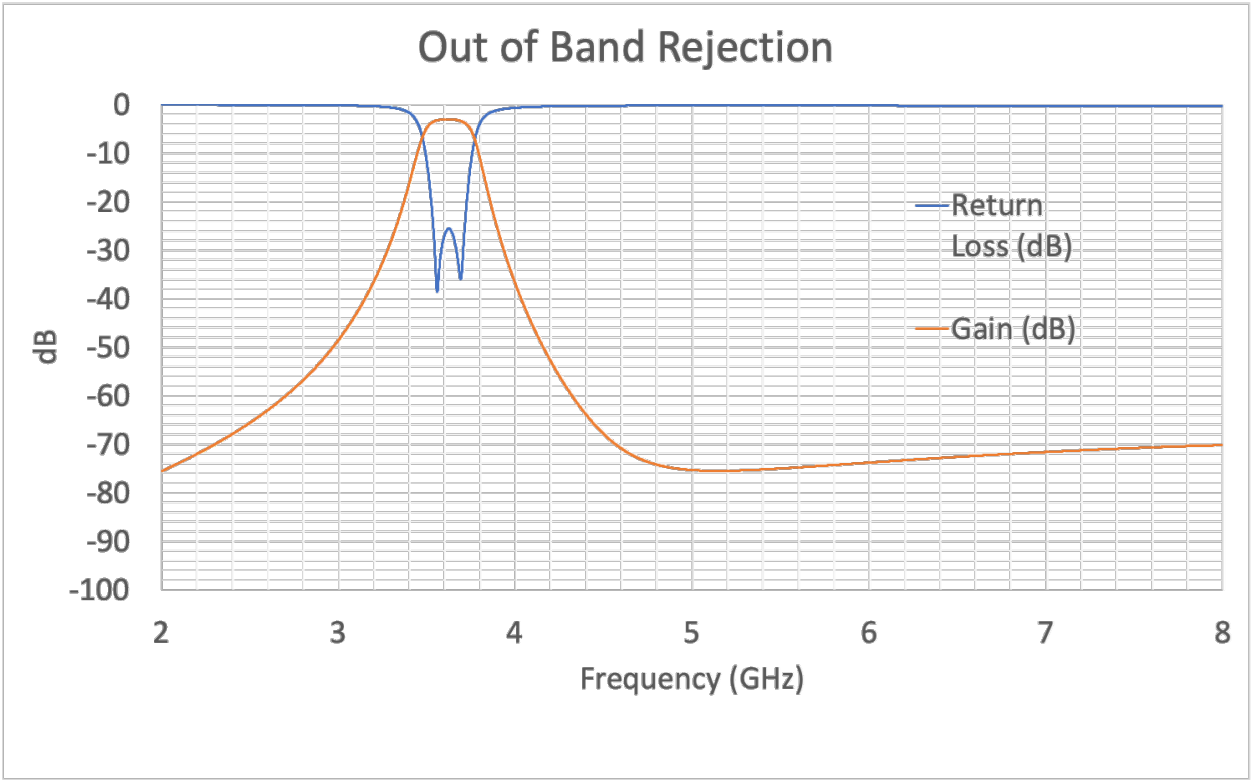

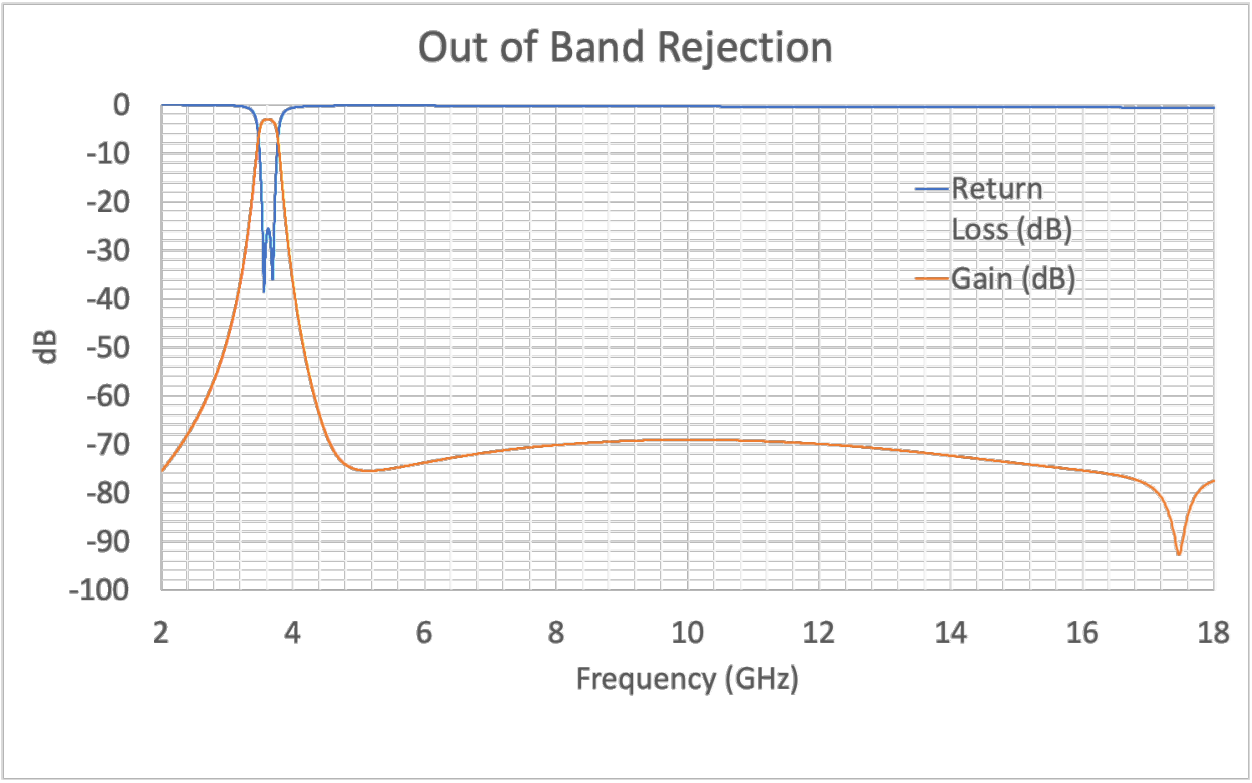

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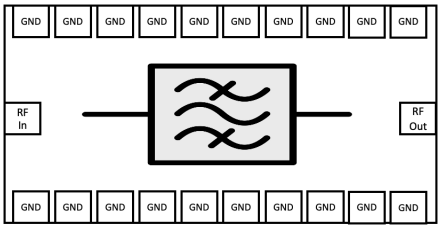
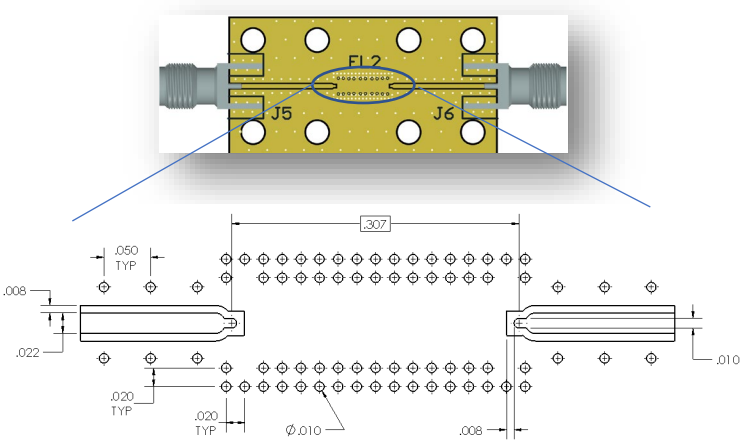
RECOMMENDED BOARD FOOTPRINT



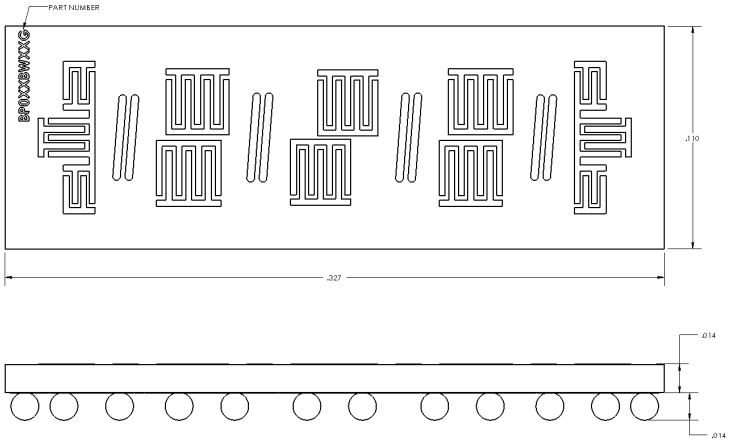
Functional Block Diagram

GCPW:
W=22mils
G=8mils
H=14mils
Er=3.7

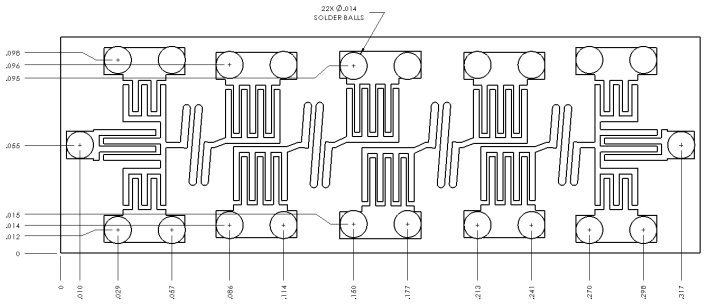


COMPONENT OUTLINE

Top View



Bottom View



PART NUMBER DESCRIPTION

BP 036 BW 02 S

- **BP** — Filter Type
- **036** — Center Freq: 036 = 3.6 GHz
- **BW** — Bandwidth
- **02** — Bandwidth (GHz): 02 = 0.2 GHz
- **S** — Surface Mount

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