

3.75 GHz Bandpass Filter

Data Sheet

BP038BW02S

Output

Pin 2

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

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

-10 S21 S11 -20 Insertion Loss (dB) -30 -40

FUNCTIONAL BLOCK DIAGRAM

Input

Pin 1

-50

-60

-70

3.8 Frequency (GHz)

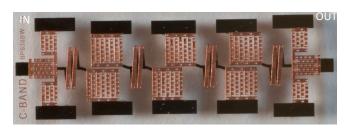
Typical Data

Parameter	Frequency Range (GHz)	Min	Typ. (actual)	Max
Insertion Loss (dB)	3.65 – 3.85 GHz		2.9	4
VSWR (1dB BW)			1.5	2.0
Low Side Rejection (dB)	DC- 3 GHz	-50		
High Side Rejection (dB)	4.5GHz – 18Ghz	-50	-65	
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			

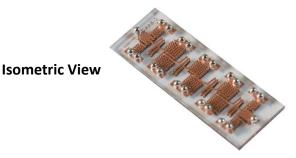
GENERAL DESCRIPTION

ED2's C-band Bandpass Filter is a fused silica (glass) highperformance, low cost, BGA-type surface mount component. The filter typically has a <3 dB insertion loss over a 200 MHz bandwidth. The filter's excellent rejection makes it a perfect roofing filter in complement to SAW/BAW applications. Filter was specifically designed for cellular c-band applications. This small size filter has minimal variation in performance and is also highly repeatable from filter to filter. The filter is a RoHScompliant industry-standard device.

Top View



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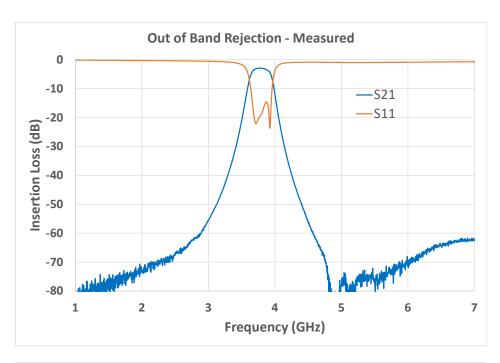


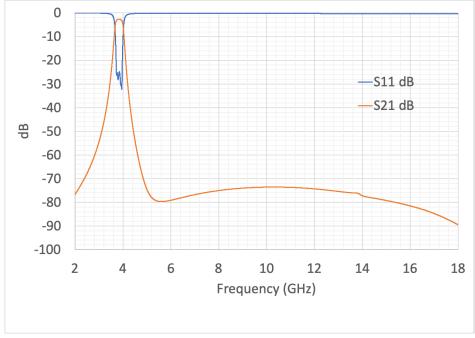
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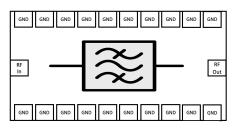


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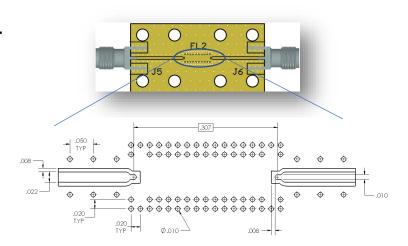
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RECOMMENDED BOARD FOOTPRINT



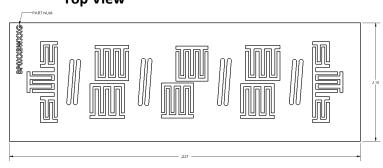
Functional Block Diagram

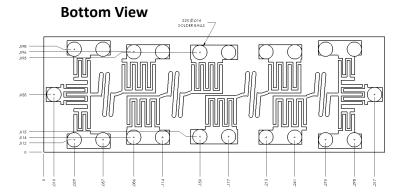
GCPW: W=22mils G=8mils H=14mils Er=3.7

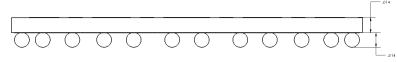


COMPONENT OUTLINE

Top View







PART NUMBER DESCRIPTION

