



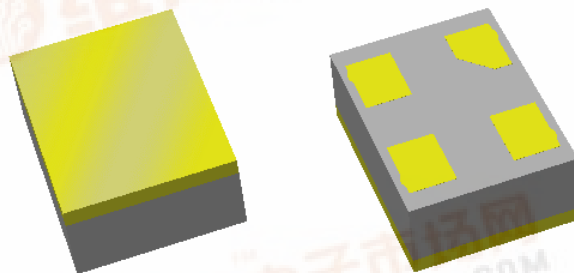
Part Number 856327

915 MHz SAW Filter

Preliminary Data Sheet

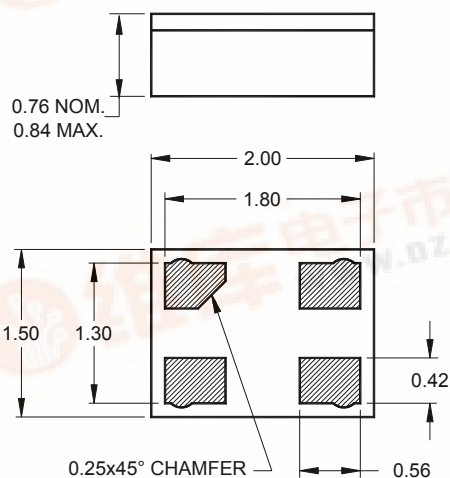
Features

- For ISM band applications
- Usable bandwidth 26 MHz
- Low loss
- High attenuation
- No impedance matching required for operation at 50 Ω
- Single-ended operation
- Chip Scale Package (CSP)
- Small size



Package

Surface Mount 2.00 x 1.50 x 0.76 mm

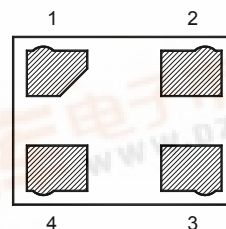


Dimensions shown are nominal in millimeters
All tolerances are ± 0.10 mm

Body: Al_2O_3 ceramic
Lid: Kovar or Alloy 42, Au over Ni plated
Terminations: Au plating 0.5 - 1.0 μ m,
over a 2 - 6 μ m Ni plating

Pin Configuration

Bottom View



Pin No.	Description
1	Input
3	Output
2,4	Case ground



Preliminary Data Sheet

Electrical Specifications ⁽¹⁾

Operating Temperature Range: ⁽²⁾ -30 to +85 °C

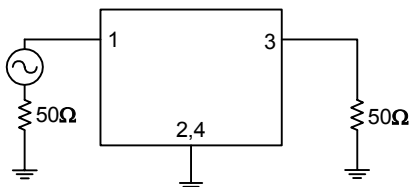
Parameter ⁽³⁾	Minimum	Typical ⁽⁴⁾	Maximum	Unit
Center Frequency	-	915	-	MHz
Maximum Insertion Loss 902 - 928 MHz	-	2.3	3.0	dB
Absolute Attenuation				
10 - 857.5 MHz	40	47	-	dB
857.5 - 882.5 MHz	35	43	-	dB
970 - 1005 MHz	35	40	-	dB
1005 - 1110 MHz	40	50	-	dB
1110 - 3000 MHz	30	30	-	dB
Amplitude Ripple 902 - 928 MHz	-	0.35	1	dB p-p
Group Delay Variation 902 - 928 MHz	-	15	50	nS p-p
Input/Output Return Loss 902 - 928 MHz	10	14	-	dB
Source Impedance ⁽⁵⁾	-	50	-	Ω
Load Impedance ⁽⁵⁾	-	50	-	Ω

Notes:

1. All specifications are based on the test circuit shown below
2. In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over temperature
3. Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
4. Typical values are given at 25 °C
5. This is the optimum impedance in order to achieve the performance shown

Test Circuit:

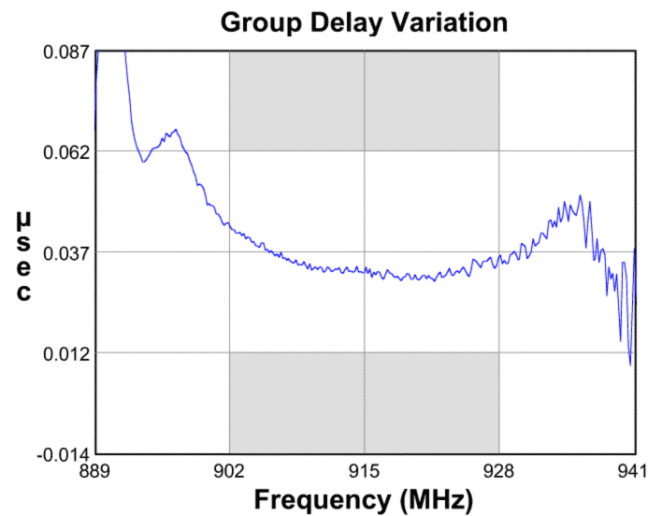
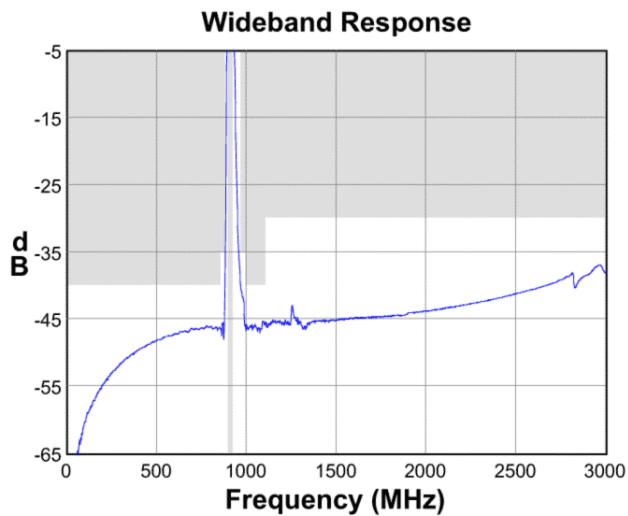
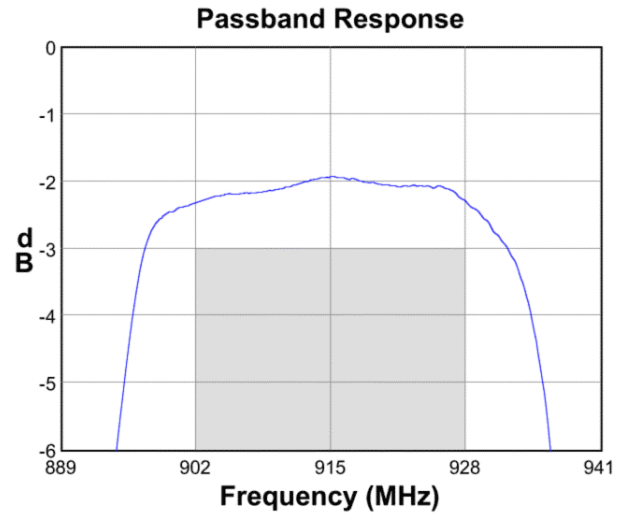
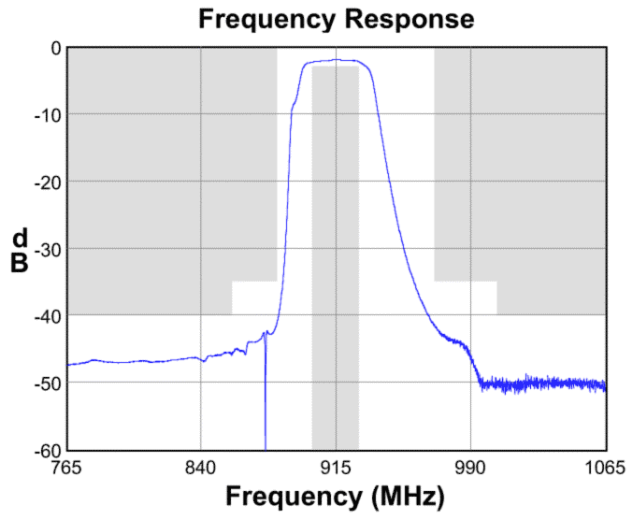
50 Ω
Single-ended



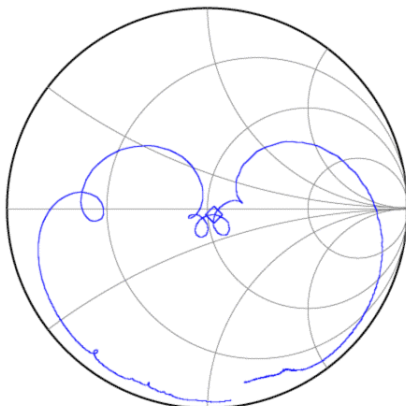
No impedance matching
required

Preliminary Data Sheet

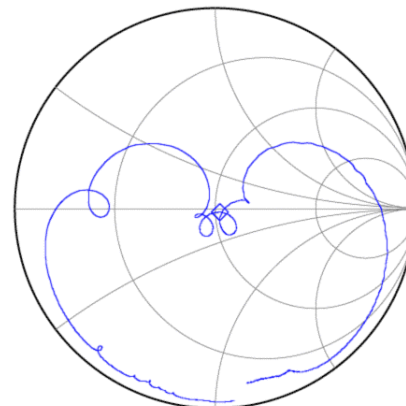
Typical Performance (at +25°C)



Input Smith Chart



Output Smith Chart

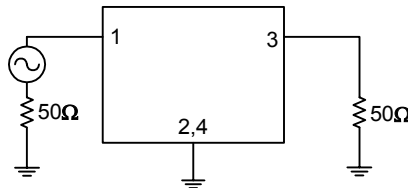


Preliminary Data Sheet

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915 MHz SAW Filter

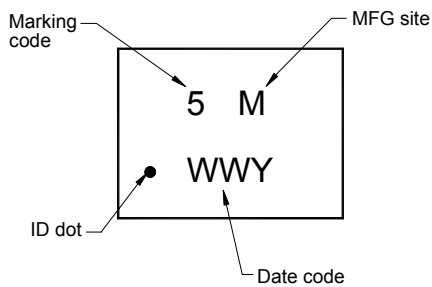
Matching Schematics

50 Ω
Single-ended

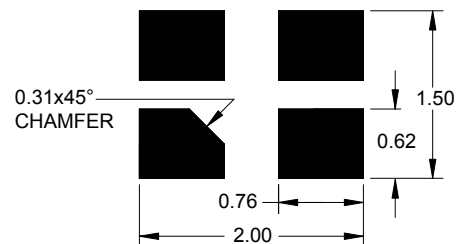


No impedance matching
required

Marking

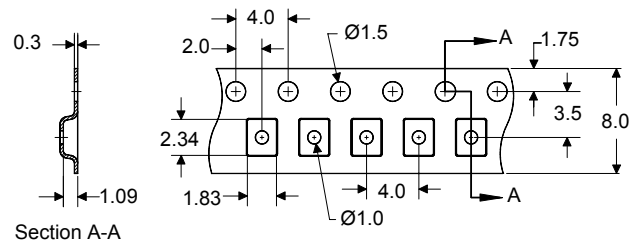
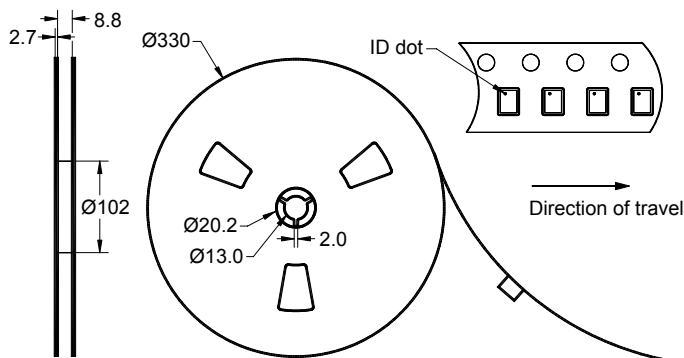


PCB Footprint



This footprint represents a recommendation only
Dimensions shown are nominal in millimeters

Tape and Reel



Dimensions shown are nominal in millimeters
Packaging quantity: 10000 units/reel

Preliminary Data Sheet

Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Unit
Operating Temperature Range	T	-30	+85	°C
Storage Temperature Range	T _{stg}	-40	+85	°C

Warnings

- Electrostatic Sensitive Device (ESD) 
- Avoid ultrasonic exposure

Links to Additional Technical Information

[PCB Layout Tips](#)[Qualification Flowchart](#)[Soldering Profile](#)[S-Parameters](#)[Other Technical Information](#)

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