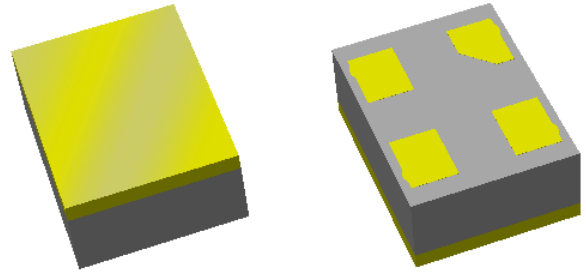


Preliminary Data Sheet

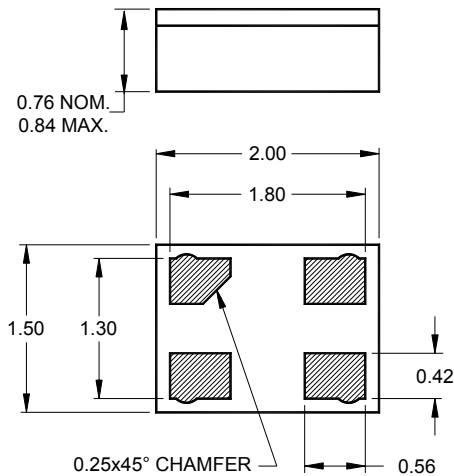
Features

- 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

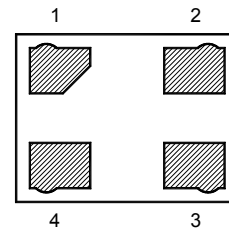


Dimensions shown are nominal in millimeters
 All tolerances are ±0.10mm

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

Pin Configuration

Bottom View



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

Preliminary Data Sheet

Electrical Specifications ⁽¹⁾

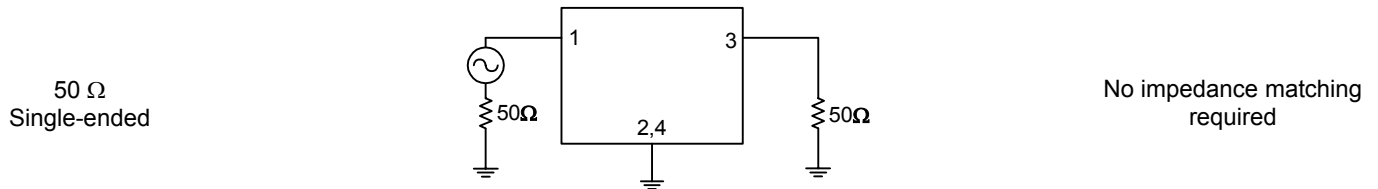
Operating Temperature Range: ⁽²⁾ -30 to +85 °C

| 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:

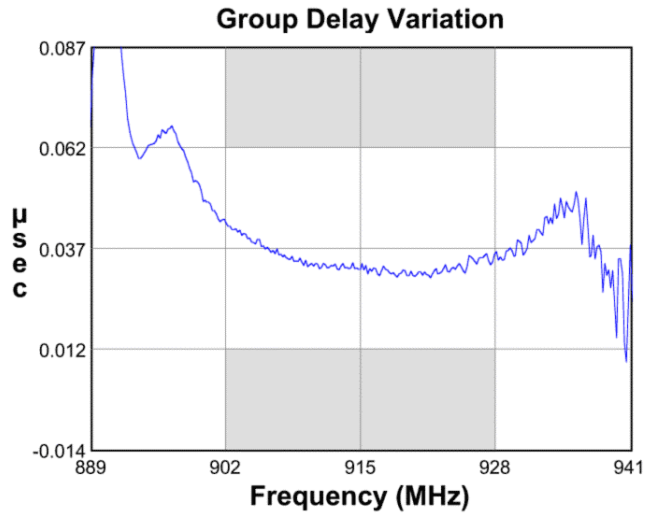
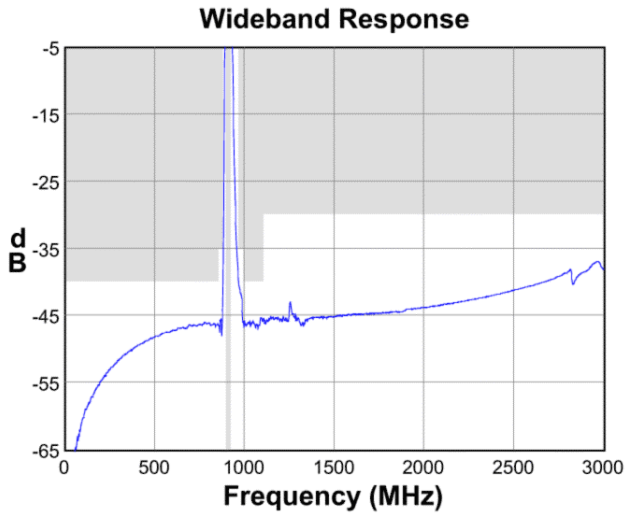
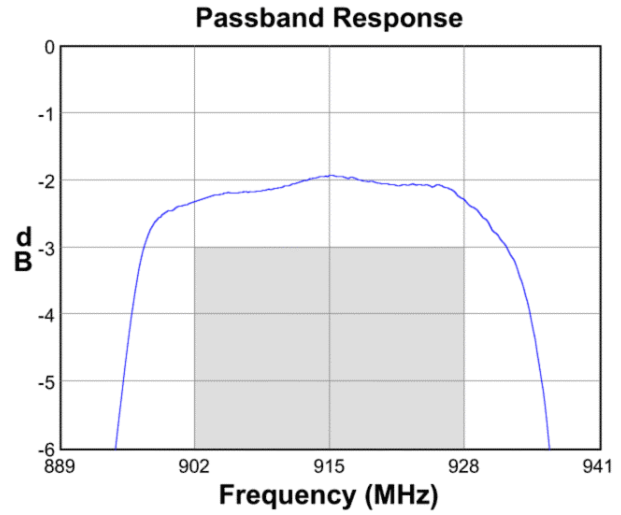
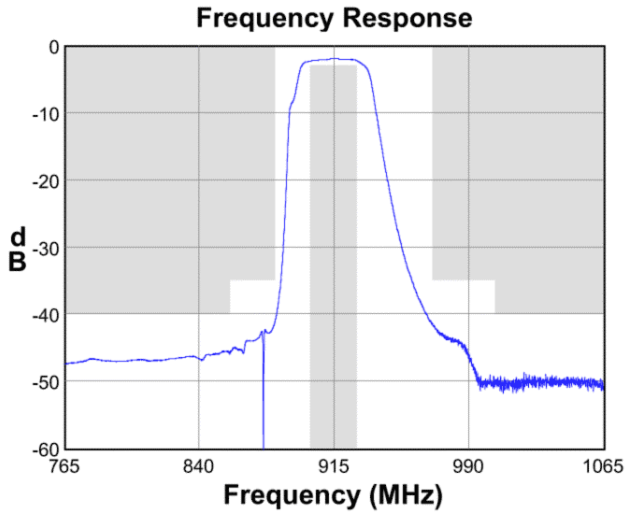
1. All specifications are based on the test circuit shown below
2. In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over temperature
3. Electrical margin has been built into the design to account for the variations due to temperature 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:

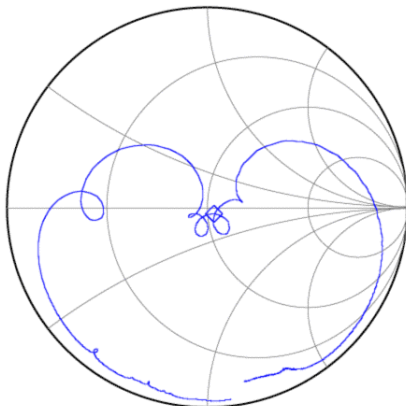


Preliminary Data Sheet

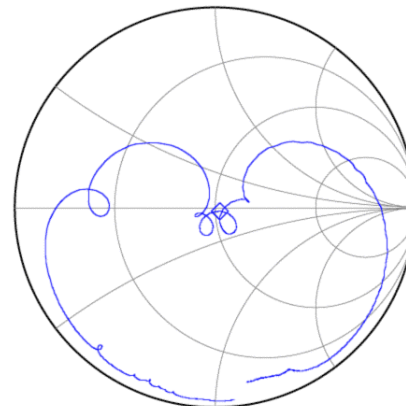
Typical Performance (at +25°C)



Input Smith Chart



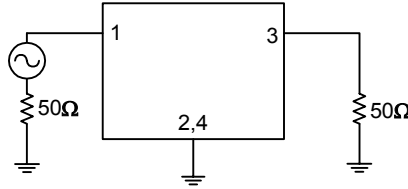
Output Smith Chart



Preliminary Data Sheet

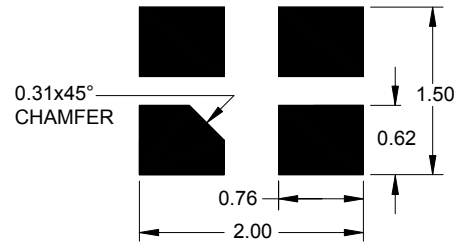
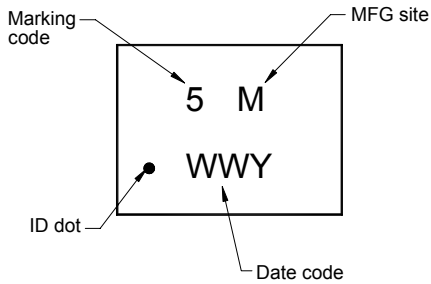
Matching Schematics

50 Ω
Single-ended



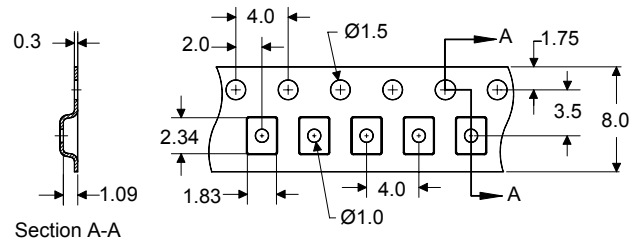
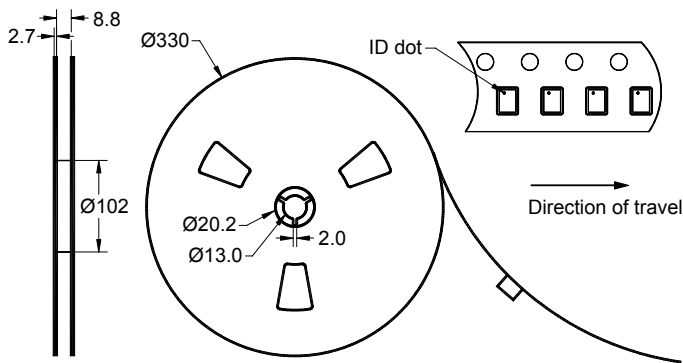
No impedance matching required

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](#)

Sawtek's liability is limited only to the Surface Acoustic Wave (SAW) component(s) described in this data sheet. Sawtek does not accept any liability for applications, processes, circuits or assemblies which are implemented using any Sawtek component described in this data sheet.

Contact Information



PO Box 609501
 Orlando, FL 32860-9501
 USA

Phone: +1 (407) 886-8860
 Fax: +1 (407) 886-7061
 Email: custservice@sawtek.com
 Web: www.sawtek.com

Or contact one of our worldwide
 Network of [sales offices](#),
[Representatives or distributors](#)