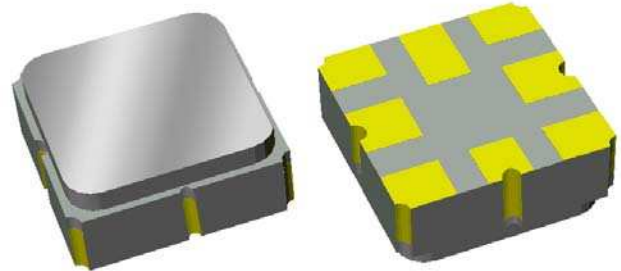


Preliminary Data Sheet

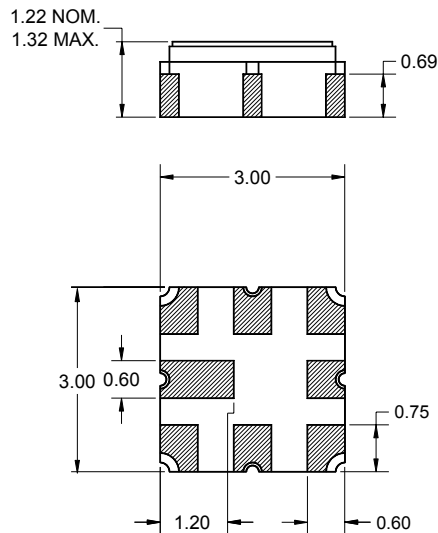
Features

- For FRS applications
- Usable bandwidth 6 MHz
- Low loss
- High attenuation
- No impedance matching required for operation at 50 Ω
- Single-ended operation
- Ceramic Surface Mount Package (SMP)
- Small size



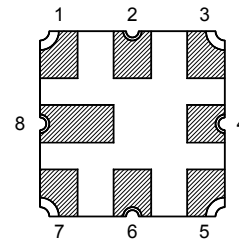
Package

Surface Mount 3.00 x 3.00 x 1.22 mm



Pin Configuration

Bottom View



| Pin No. | Description |
|-------------|-------------|
| 2 | Input |
| 6 | Output |
| 1,3,4,5,7,8 | Case ground |

Dimensions shown are nominal in millimeters
 All tolerances are $\pm 0.15\text{mm}$ except overall
 length and width $\pm 0.10\text{mm}$

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

Preliminary Data Sheet

Electrical Specifications ⁽¹⁾

Operating Temperature Range: ⁽²⁾ -40 to +85 °C

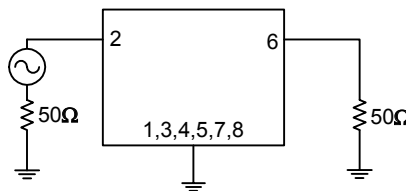
| Parameter ⁽³⁾ | Minimum | Typical | Maximum | Unit |
|--|---------|---------|---------|----------|
| Center Frequency | - | 465 | - | MHz |
| Maximum Insertion Loss 462 - 468 MHz | - | 1.43 | 1.7 | dB |
| Amplitude Variation 462 - 468 MHz | - | 0.16 | 0.5 | dB |
| Attenuation 421.6 MHz | 50 | 70 | - | dB |
| Minimum Rejection 100 - 441 MHz | 48 | 61 | - | dB |
| 441 - 445 MHz | 40 | 62 | - | dB |
| 485 - 502 MHz | 24 | 29 | - | dB |
| 502 - 510 MHz | 40 | 47 | - | dB |
| 510 - 1000 MHz | 40 | 53 | - | dB |
| Input/Output VSWR 462 - 468 MHz | - | 1.42 | 1.6 | - |
| Source Impedance ⁽⁴⁾ | - | 50 | - | Ω |
| Load Impedance ⁽⁴⁾ | - | 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. This is the optimum impedance in order to achieve the performance shown

Test Circuit:

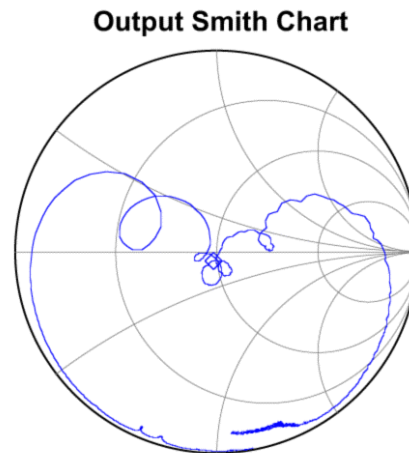
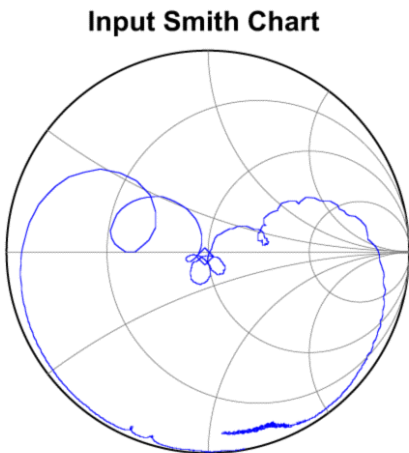
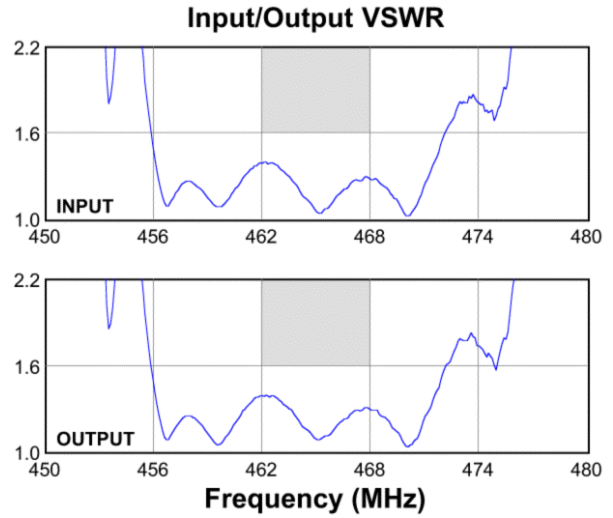
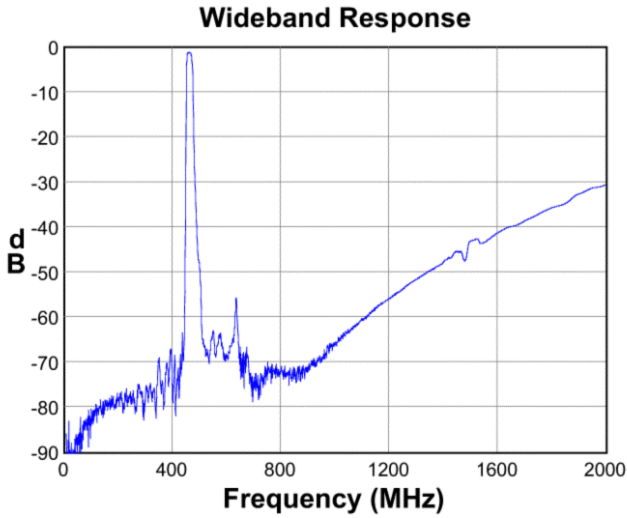
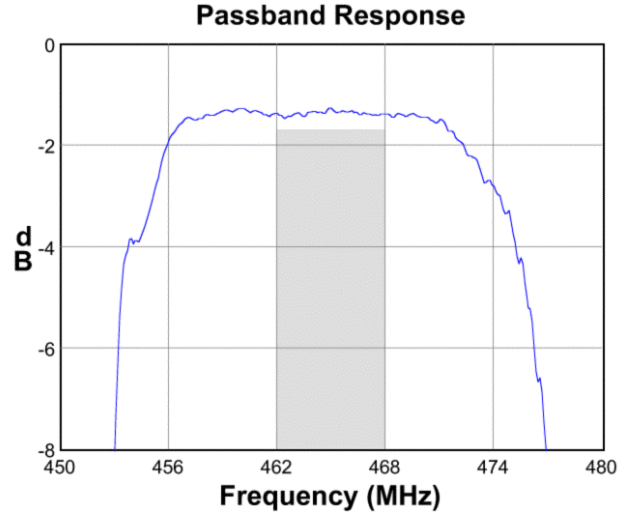
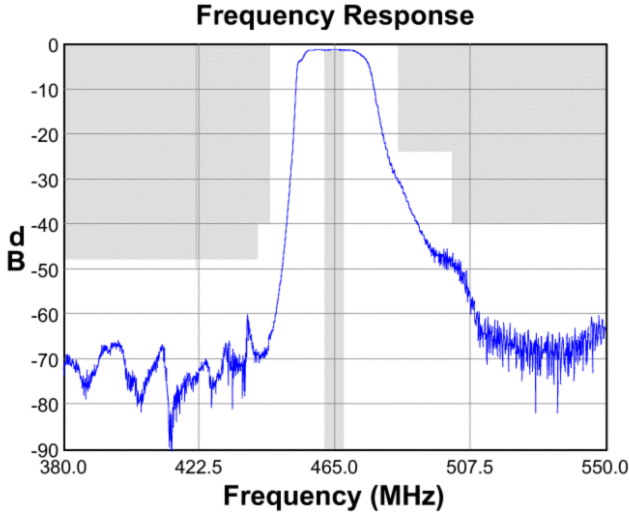
50 Ω
Single-ended



No impedance matching required

Preliminary Data Sheet

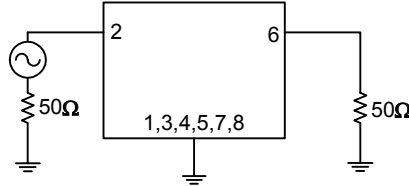
Typical Performance (at +25°C)



Preliminary Data Sheet

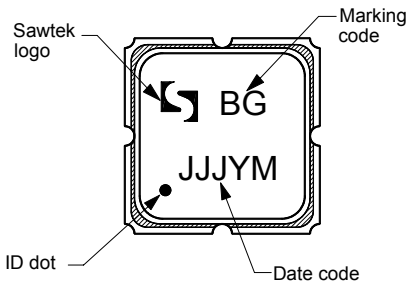
Matching Schematics

50 Ω
Single-ended



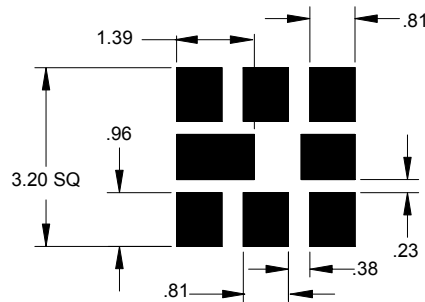
No impedance matching required

Marking



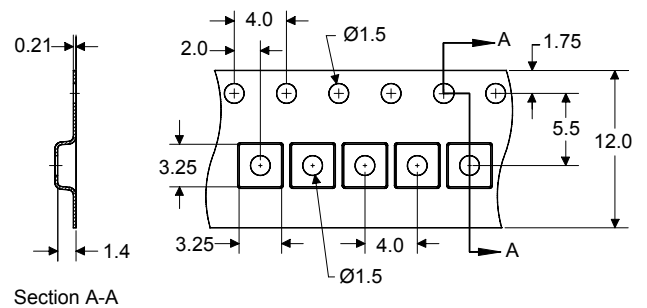
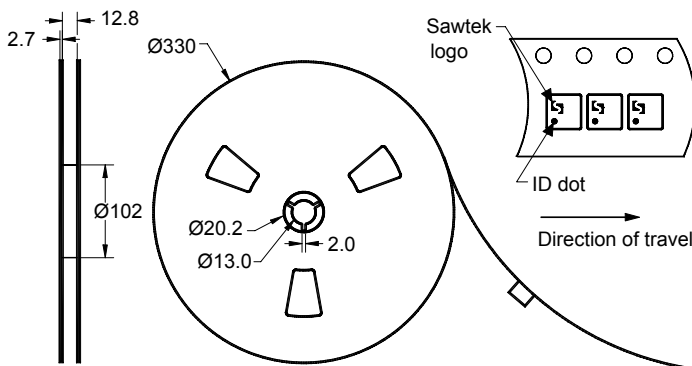
The date code consists of: JJJ = Julian day,
Y = last digit of year, M = manufacturing site code

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: 5000 units/reel

Preliminary Data Sheet

Maximum Ratings

| Parameter | Symbol | Minimum | Maximum | Unit |
|-----------------------------|------------------|---------|---------|------|
| Operating Temperature Range | T | -40 | +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](#)