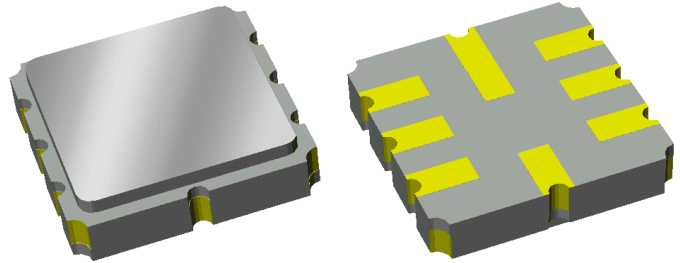


Data Sheet

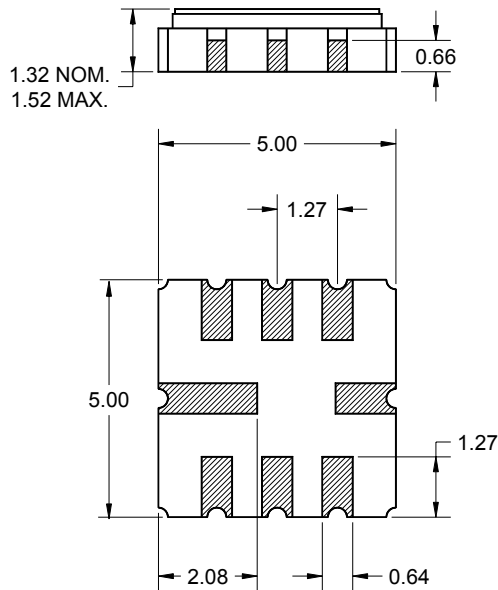
Features

- For WLAN applications
- Usable bandwidth of 17 MHz
- High attenuation
- Balanced or Single-ended operation
- Ceramic Surface Mount Package (SMP)
- Small size



Package

Surface Mount 5.00 x 5.00 x 1.32 mm

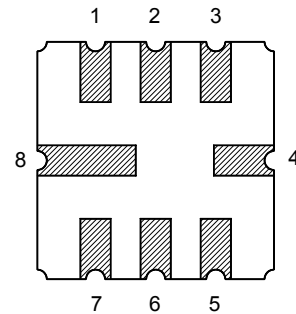


Dimensions shown are nominal in millimeters
 All tolerances are ± 0.15 mm except overall
 length and width $\pm 0.15/\pm 0.10$ mm

Body: Al_2O_3 ceramic
 Lid: Kovar, 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 |
|---------|---------------|
| 2 | Input return |
| 3 | Input |
| 6 | Output return |
| 7 | Output |
| 1,4,5,8 | Case Ground |

Data Sheet

Electrical Specifications ⁽¹⁾

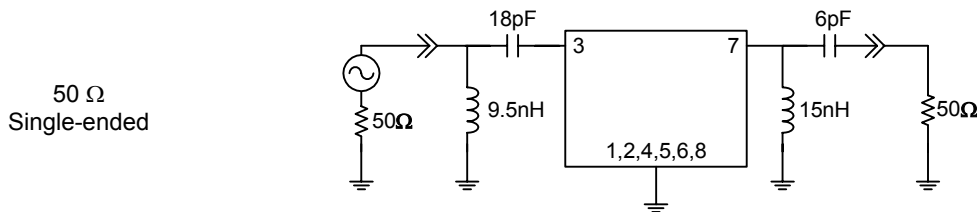
Operating Temperature Range: ⁽²⁾ -10 to +80 °C

| Parameter ⁽³⁾ | Minimum | Typical | Maximum | Unit |
|--|---------|---------|---------|----------|
| Center Frequency, f_0 | - | 374 | - | MHz |
| Minimum Insertion Loss | - | 8.5 | 10.5 | dB |
| 3 dB Bandwidth | 17 | 20.5 | - | MHz |
| Relative Attenuation ⁽⁴⁾ | | | | |
| 309 - 352 MHz | 40 | 50 | - | dB |
| 352 - 357.5 MHz | 35 | 50 | - | dB |
| 390.5 - 392 MHz | 35 | 45 | - | dB |
| 392 - 396 MHz | 35 | 40 | - | dB |
| 396 - 439 MHz | 38 | 42 | - | dB |
| 439 - 454 MHz | 40 | 45 | - | dB |
| Passband Variation | - | 0.5 | 1.0 | dB |
| Group Delay Variation | - | 40 | 100 | nsec |
| Triple Transit Suppression | 30 | 40 | - | dB |
| Optimal Source Impedance: ⁽⁵⁾ | - | 50 | - | Ω |
| Optimal Load Impedance: ⁽⁵⁾ | - | 50 | - | Ω |

Notes:

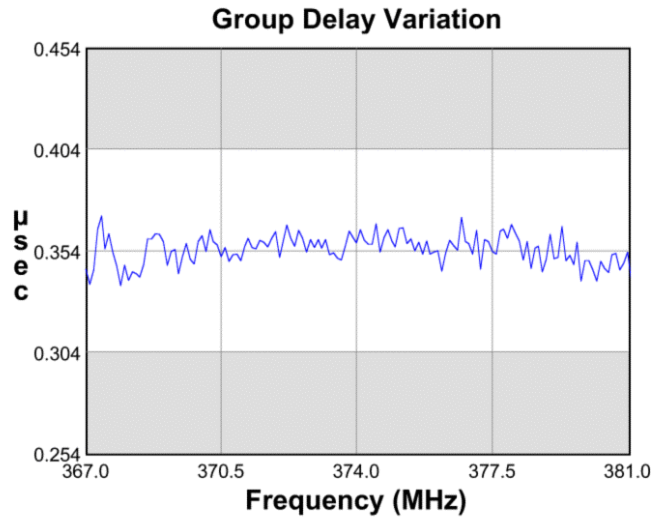
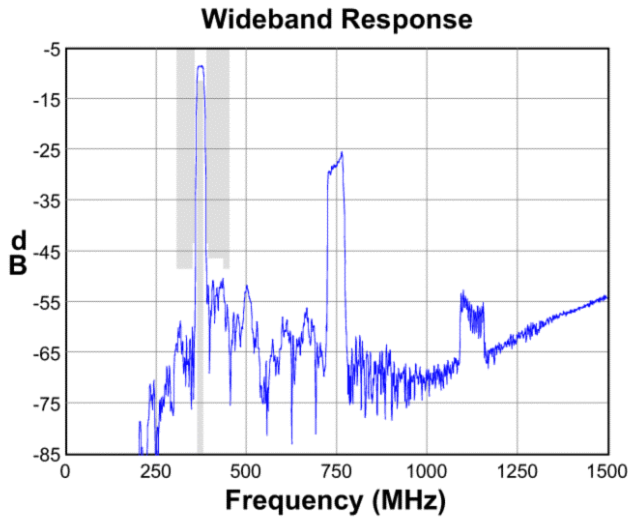
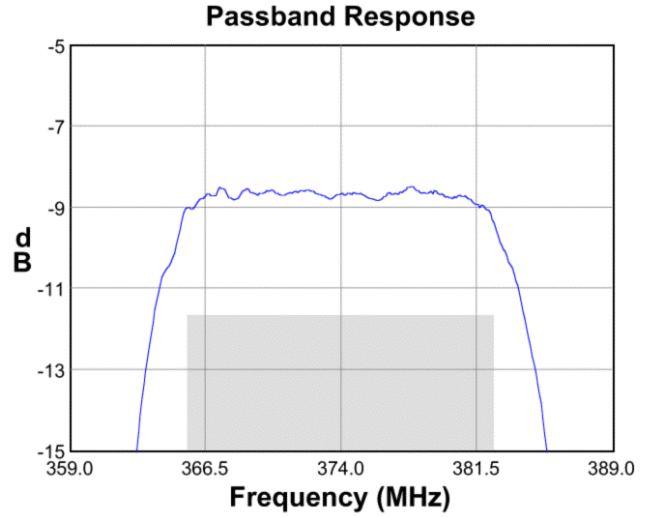
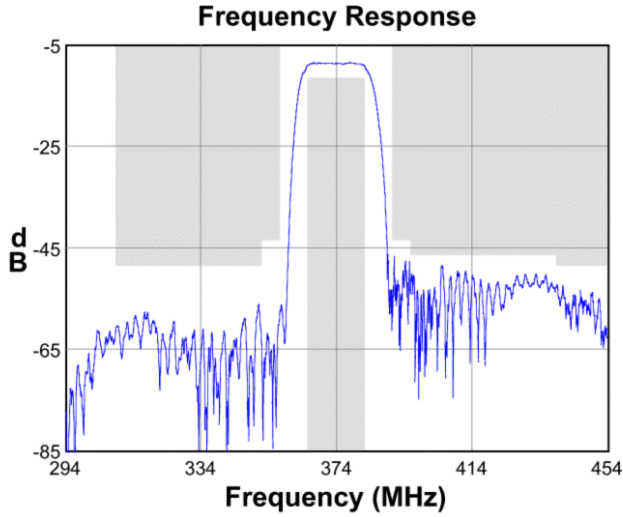
- All specifications are based on the test circuit shown below
- In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over temperature
- Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
- Relative to minimum insertion loss
- Sawtek's production specifications reflect the typical performance in a 50 ohm single-ended system. This filter can be used in both single-ended and/or differential modes at each port. In addition, similar performance can be achieved in source and load impedances ranging from 50 to 1000.

Test Circuit:

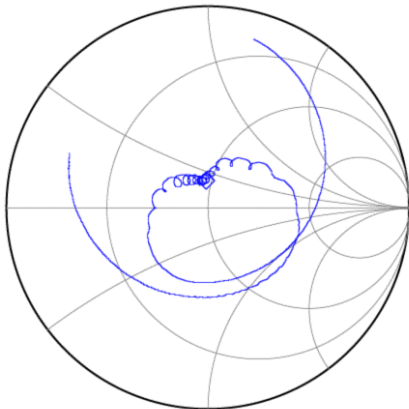


Data Sheet

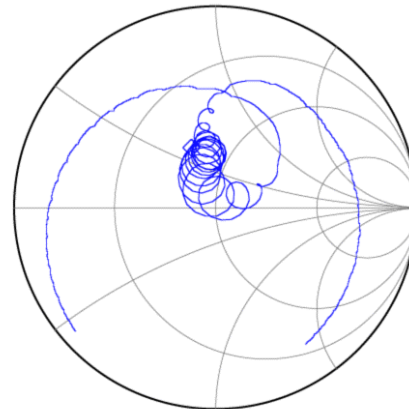
Typical Performance (at +25°C)



Input Smith Chart

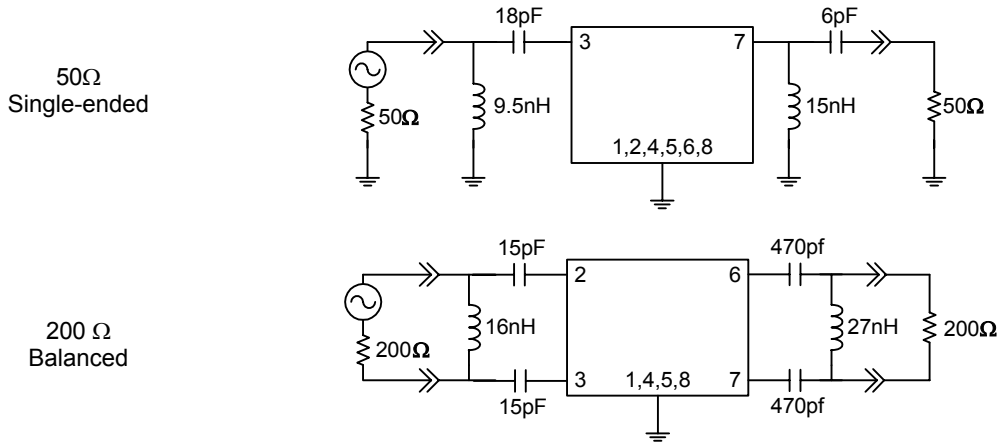


Output Smith Chart

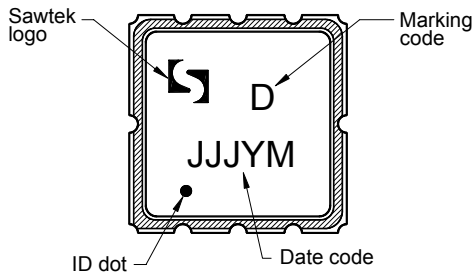


Data Sheet

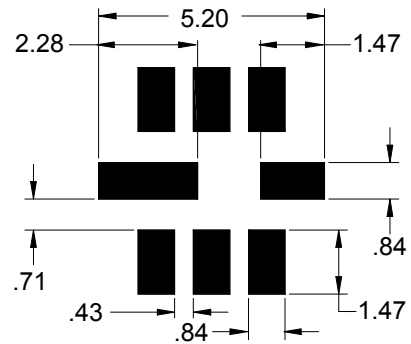
Matching Schematics



Marking PCB Footprint

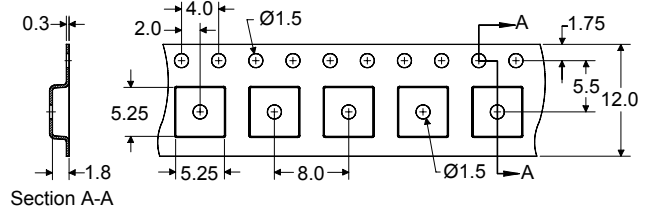
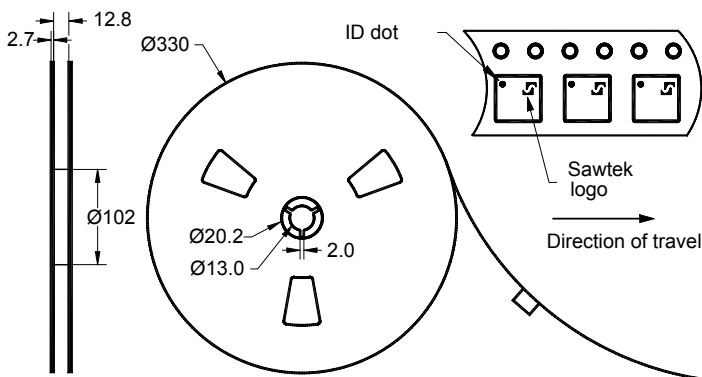


The date code consists of: JJJ = Julian day,
Y = last digit of year, M = manufacturing site code



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

Tape and Reel




Dimensions shown are nominal in millimeters
Packaging quantity: 4000 units/reel

Data Sheet

Maximum Ratings

| Parameter | Symbol | Minimum | Maximum | Unit |
|-----------------------------|------------------|---------|---------|------|
| Operating Temperature Range | T | -10 | +80 | °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](#)

[Reel and Packaging Label](#)

[Other Technical Information](#)

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