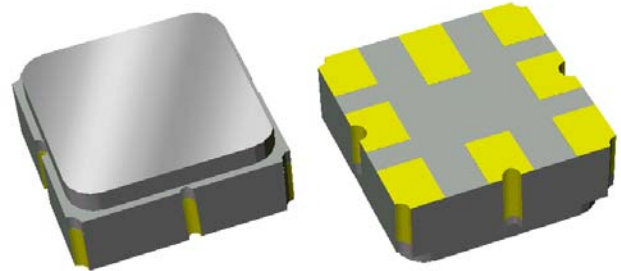


Preliminary Data Sheet

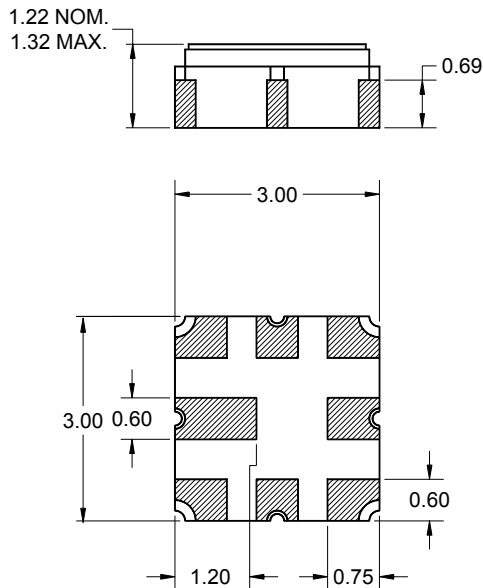
Features

- For 802.11a WLAN applications
- Usable bandwidth 17 MHz
- High attenuation
- No impedance matching required for operation at 200 Ω
- Balanced operation
- Ceramic Surface Mount Package (SMP)
- Hermetic



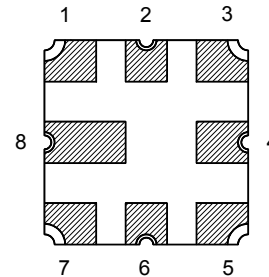
Package

Surface Mount 3.00 x 3.00 x 1.22 mm



Pin Configuration

Bottom View



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

Dimensions shown are nominal in millimeters
 All tolerances are ± 0.15 mm except overall length and width ± 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

Preliminary Data Sheet

Electrical Specifications ⁽¹⁾

Operating Temperature Range: ⁽²⁾ 0 to +70 °C

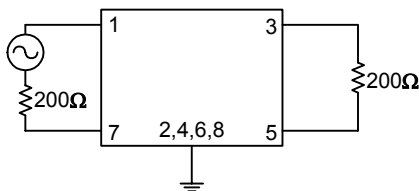
| Parameter ⁽³⁾ | Minimum | Typical | Maximum | Unit |
|---|---------|---------|---------|--------|
| Center Frequency | - | 810 | - | MHz |
| Minimum Insertion Loss | - | 2.95 | 4 | dB |
| Lower 1.5 dB Bandedge ⁽⁴⁾ | - | 798.895 | 801.5 | MHz |
| Upper 1.5 dB Bandedge | 818.5 | 819.857 | - | MHz |
| Lower 15.5 dB Bandedge ⁽⁴⁾ | 790 | 795.205 | - | MHz |
| Upper 15.5 dB Bandedge | - | 827.079 | 830 | MHz |
| Lower 45 dB Bandedge ⁽⁴⁾ | 760 | 787.65 | - | MHz |
| Upper 45 dB Bandedge | - | 831.617 | 860 | MHz |
| Amplitude Variation 801.5 - 818.5 MHz | - | 0.63 | 1.5 | dB p-p |
| Group Delay 801.5 - 818.5 MHz | - | 0.07 | 0.1 | μsec |
| Group Delay Variation 801.5 - 818.5 MHz | - | 26.17 | 75 | nsec |
| Minimum Rejection 660 - 760 MHz | 45 | 50.3 | - | dB |
| 860 - 960 MHz | 45 | 50.2 | - | dB |
| Source Impedance ⁽⁵⁾ | - | 200 | - | Ω |
| Load Impedance ⁽⁵⁾ | - | 200 | - | 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. All attenuation measurements are measured relative to minimum insertion loss
5. This is the optimum impedance in order to achieve the performance shown

Test Circuit:

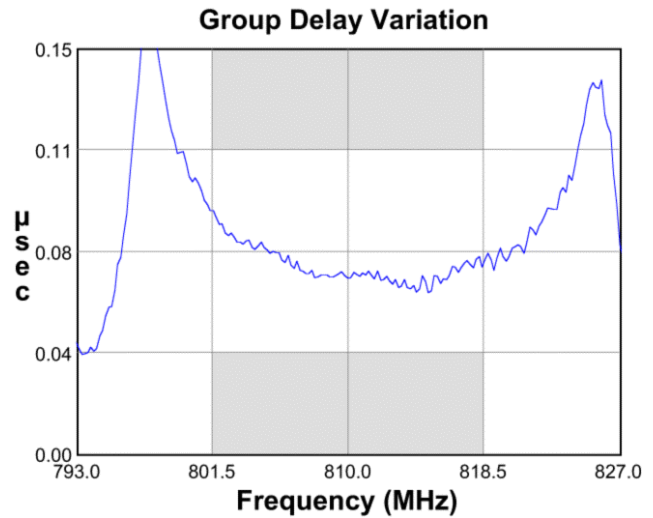
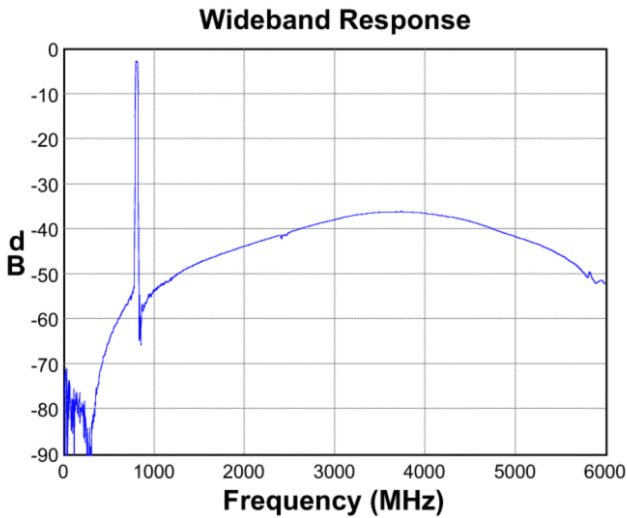
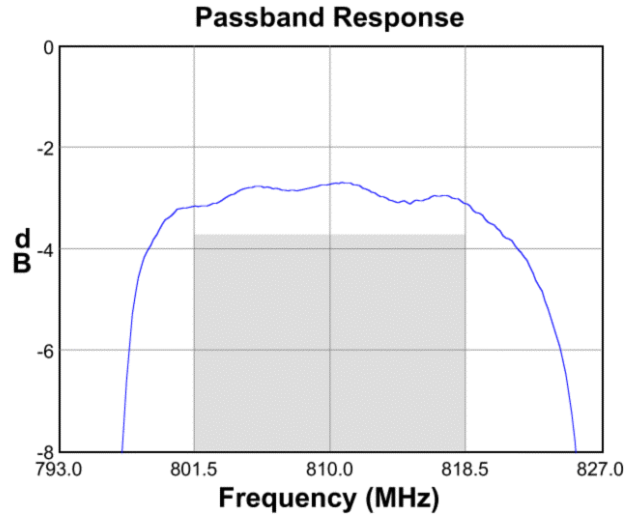
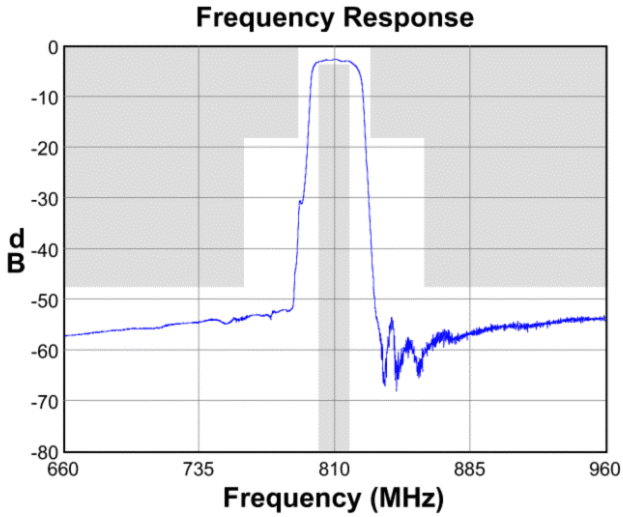
200 Ω
Balanced



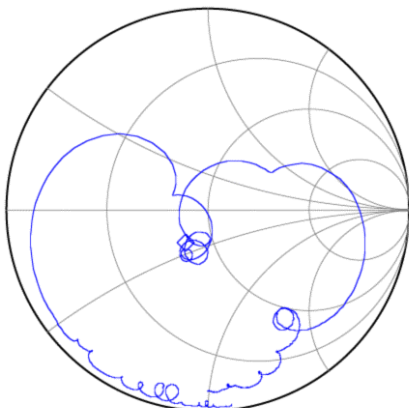
No impedance matching
required

Preliminary Data Sheet

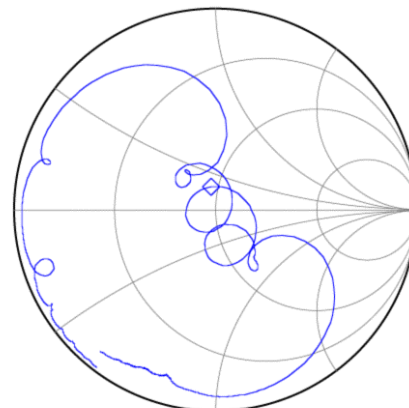
Typical Performance (at +25°C)



Input Smith Chart



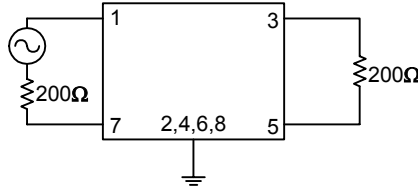
Output Smith Chart



Preliminary Data Sheet

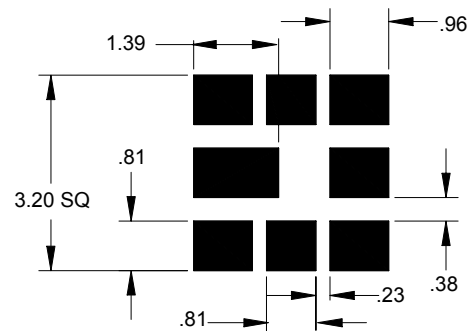
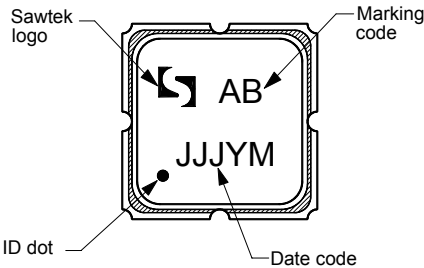
Matching Schematics

200 Ω
Balanced



No impedance matching
required

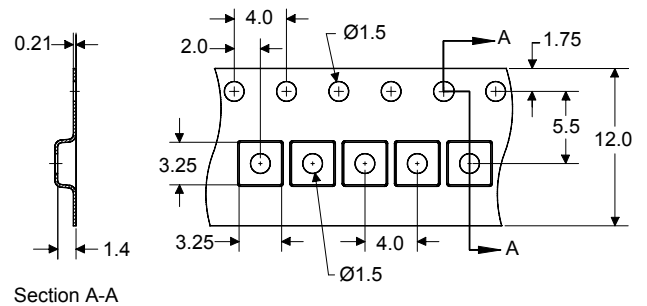
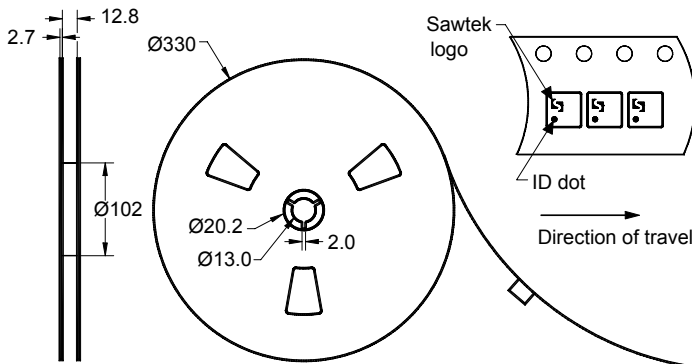
Marking PCB Footprint



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: 5000 units/reel

Preliminary Data Sheet

Maximum Ratings

| Parameter | Symbol | Minimum | Maximum | Unit |
|-----------------------------|------------------|---------|---------|------|
| Operating Temperature Range | T | 0 | +70 | °C |
| Storage Temperature Range | T _{stg} | -40 | +85 | °C |

Warnings

- Electrostatic Sensitive Device (ESD) 
- Avoid ultrasonic exposure

Material Content

- Does not contain lead (Pb) or other RoHS restricted materials

Links to Additional Technical Information

[PCB Layout Tips](#)

[Qualification Flowchart](#)

[Soldering Profile](#)

[S-Parameters](#)

[Other Technical Information](#)

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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](#),
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