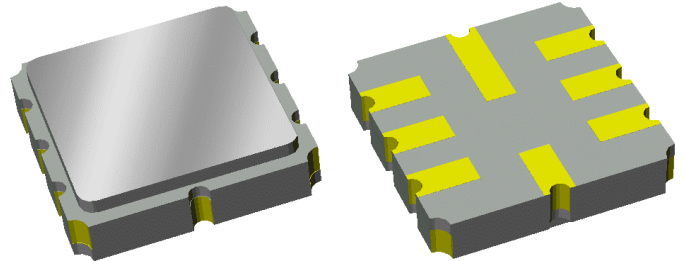


Data Sheet

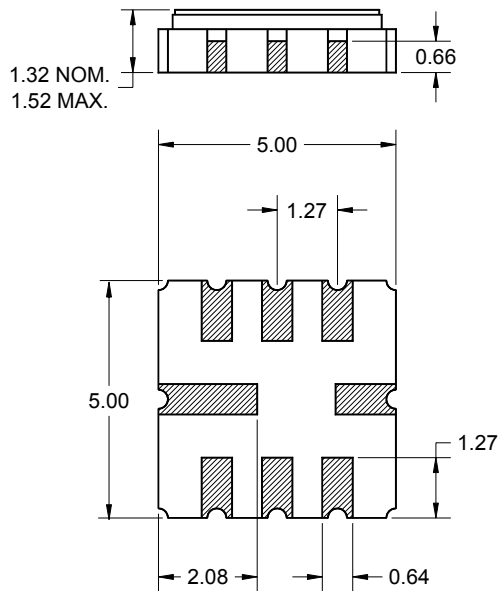
Features

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



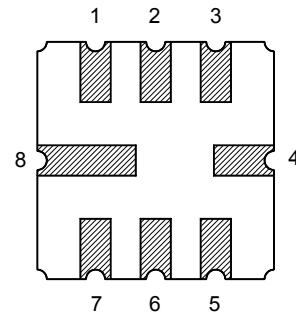
Package

Surface Mount 5.00 x 5.00 x 1.32 mm



Pin Configuration

Bottom View



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

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

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

Data Sheet

Electrical Specifications ⁽¹⁾

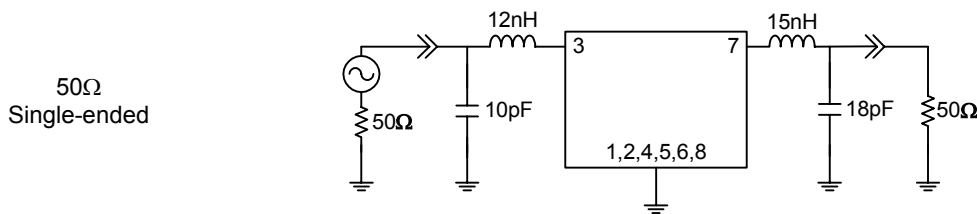
Operating Temperature Range: ⁽²⁾ -10 to +50 °C

Parameter ⁽³⁾	Minimum	Typical	Maximum	Unit
Center Frequency, f_0	-	280	-	MHz
Insertion Loss at 280 MHz	-	8.95	10	dB
Lower 3 dB Point ⁽⁴⁾	-	269.1	271.5	MHz
Upper 3 dB Point	288.5	291.1	-	MHz
Passband Ripple 271.5 - 288.5 MHz	-	0.6	1	dB p-p
Group Delay Variation 271.5 - 288.5 MHz	-	40	100	ns
Stopband Rejection ⁽⁴⁾ 10 - 250 MHz	40	43	-	dB
310 - 340 MHz	38	40	-	dB
340 - 500 MHz	40	42	-	dB
Source Impedance: ⁽⁵⁾	-	50	-	Ω
Load Impedance: ⁽⁵⁾	-	50	-	Ω

Notes:

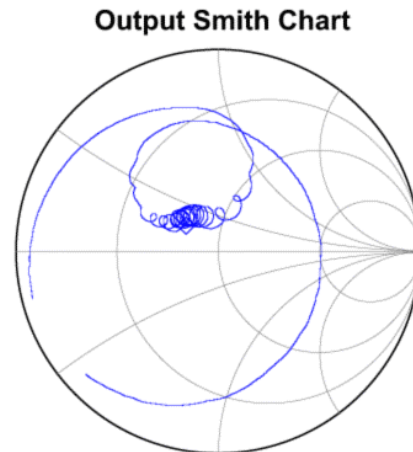
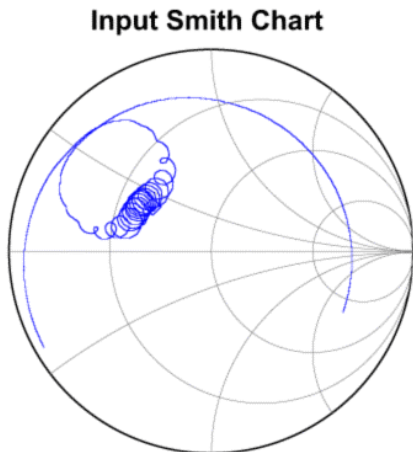
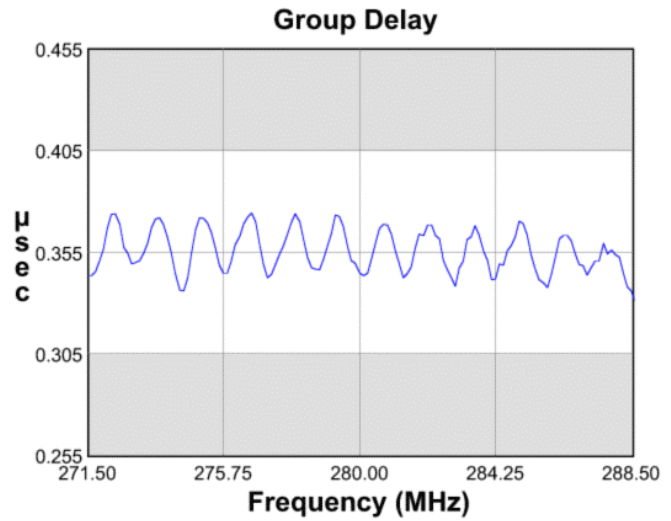
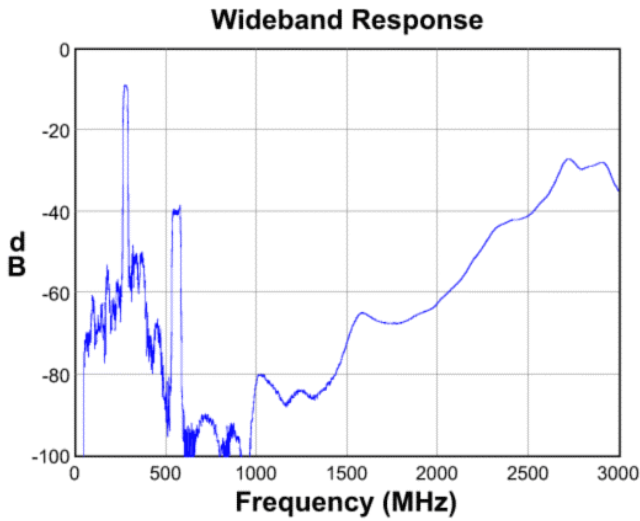
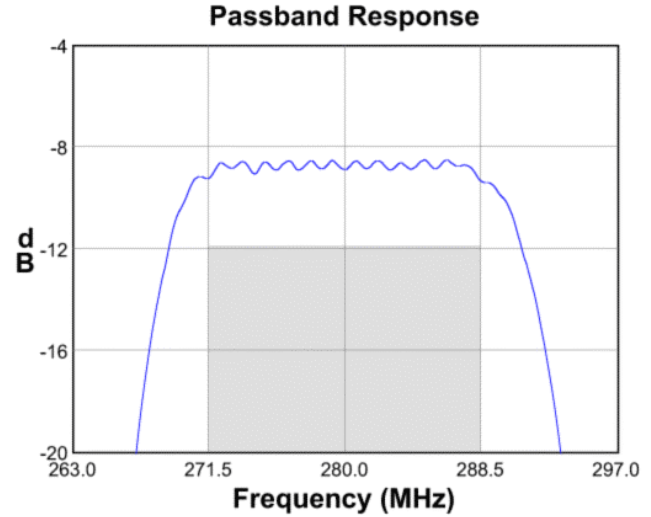
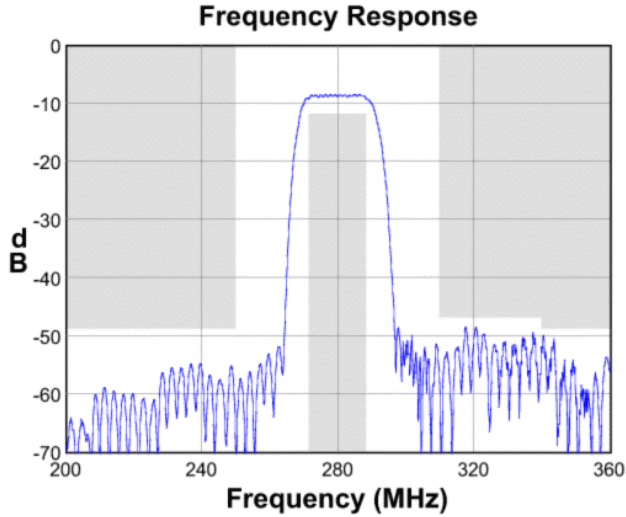
1. All specifications are based on the test circuit shown below
2. In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over temperature
3. Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
4. Relative to insertion loss at 280 MHz
5. This is the optimum impedance in order to achieve the performance shown

Test Circuit:



Data Sheet

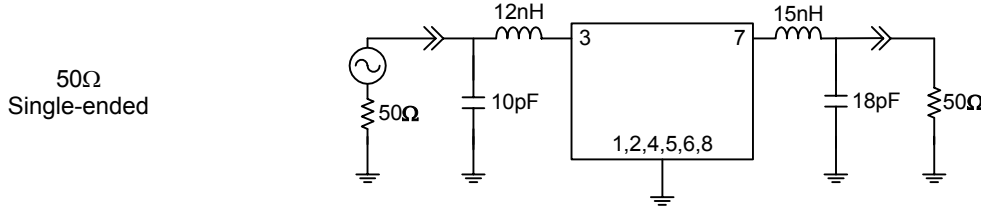
Typical Performance (at +25°C)



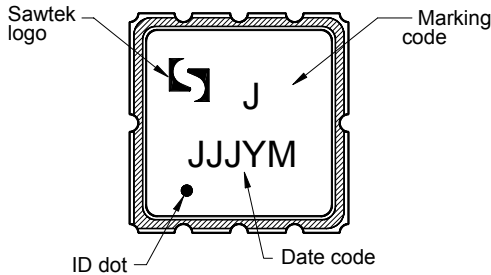
Data Sheet

Matching Schematics

Actual matching values may vary due to PCB layout and parasitics

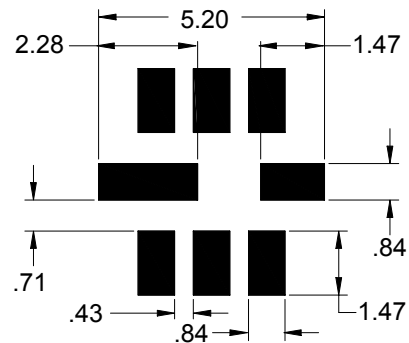


Marking



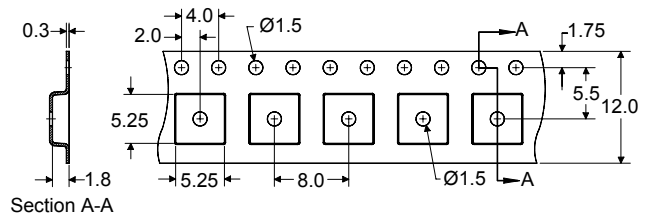
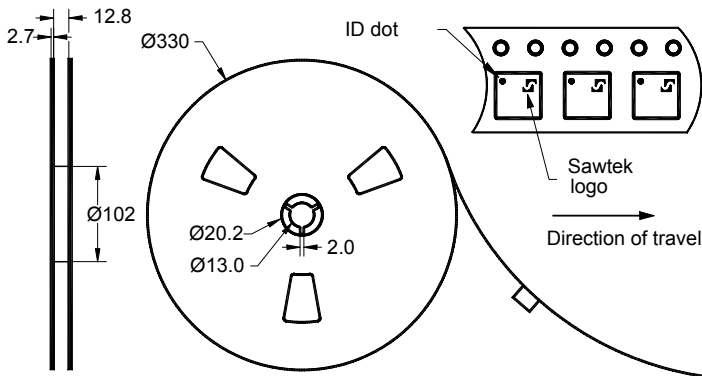
The date code consists of: JJJ = Julian day,
Y = last digit of year, M = manufacturing site code

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: 4000 units/reel

Data Sheet

Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Unit
Operating Temperature Range	T	-10	+50	°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](#)

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](#)