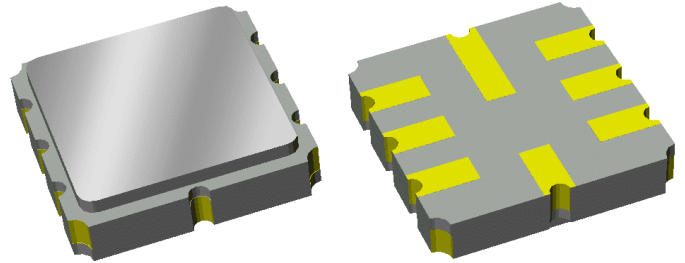


Data Sheet

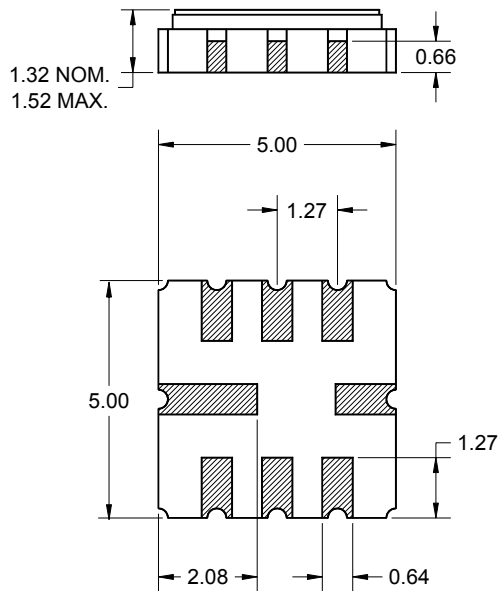
Features

- 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



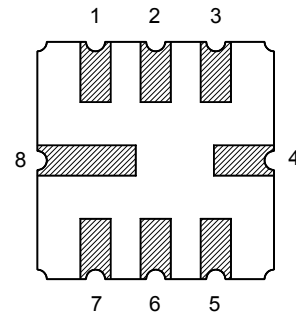
Package

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⁾

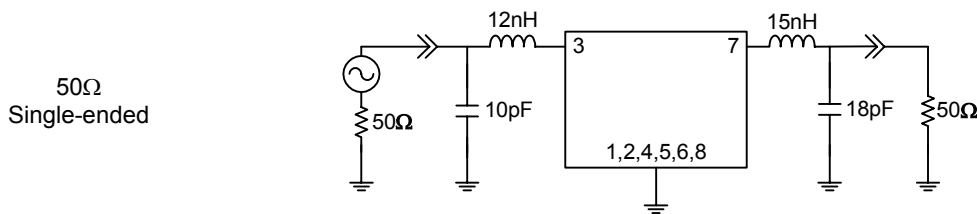
Operating Temperature Range: ⁽²⁾ -10 to +50 °C

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:

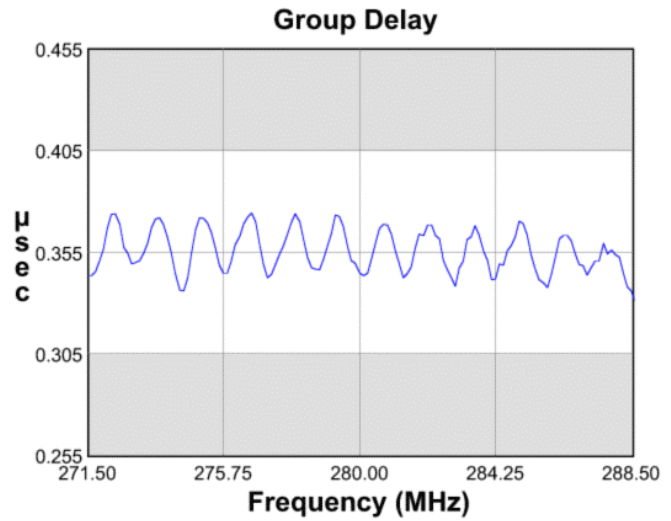
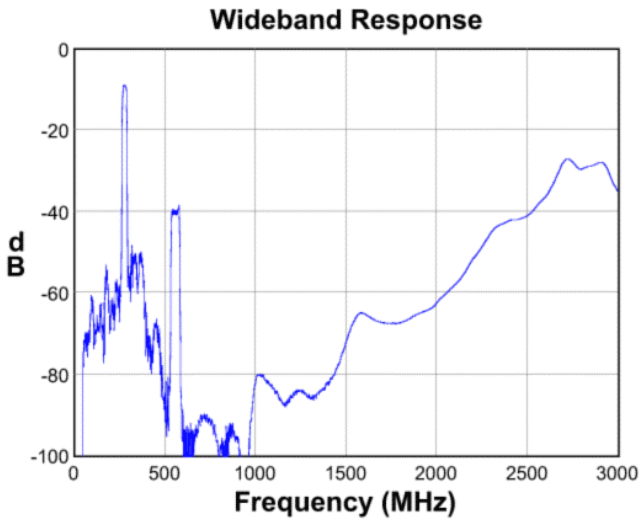
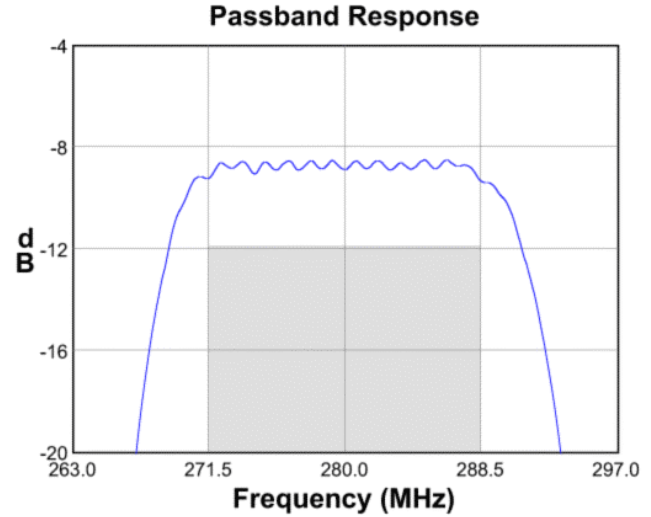
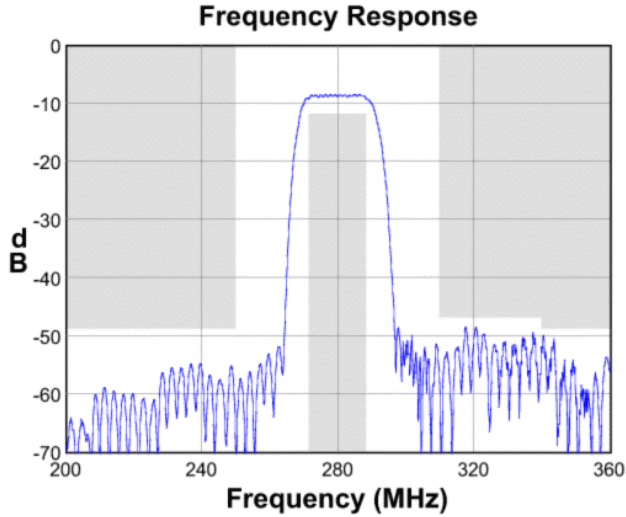
- All specifications are based on the test circuit shown below
- In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over temperature
- Electrical margin has been built into the design to account for the variations due to temperature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

Test Circuit:

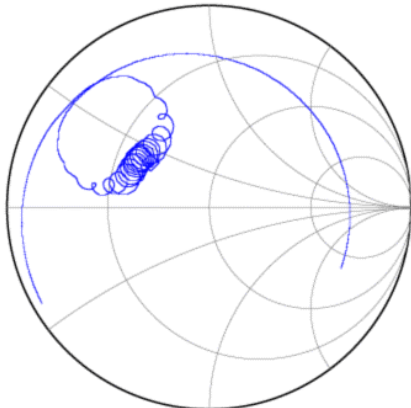


Data Sheet

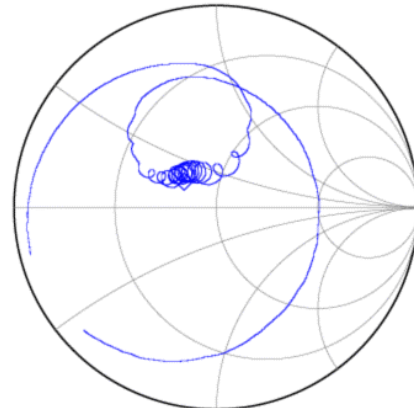
Typical Performance (at +25°C)



Input Smith Chart



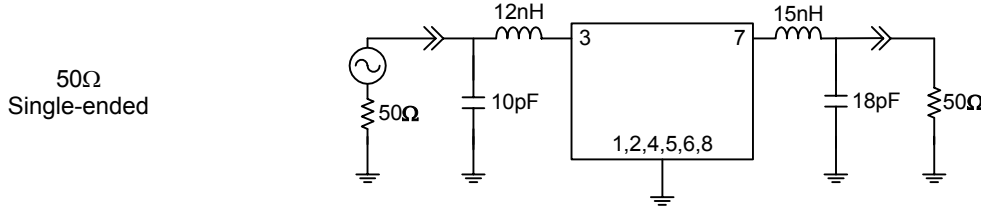
Output Smith Chart



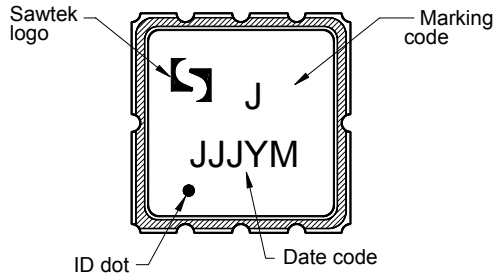
Data Sheet

Matching Schematics

Actual matching values may vary due to PCB layout and parasitics

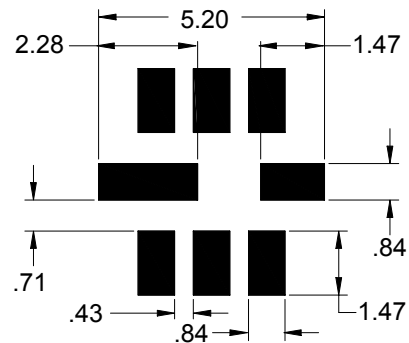


Marking



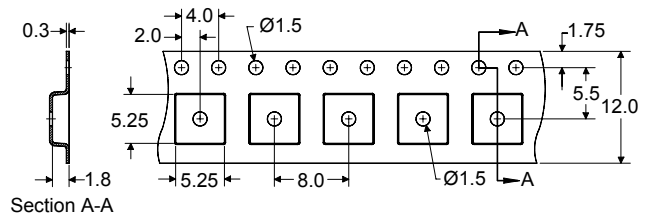
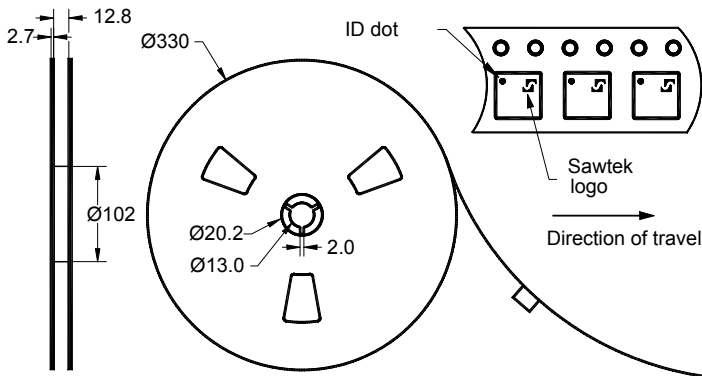
The date code consists of: JJJ = Julian day,
Y = last digit of year, M = manufacturing site code

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](#)

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[representatives or distributors](#)