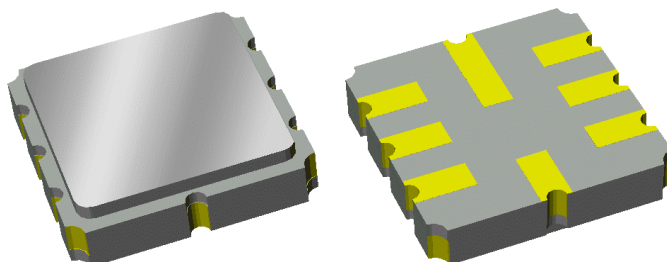


Preliminary Data Sheet

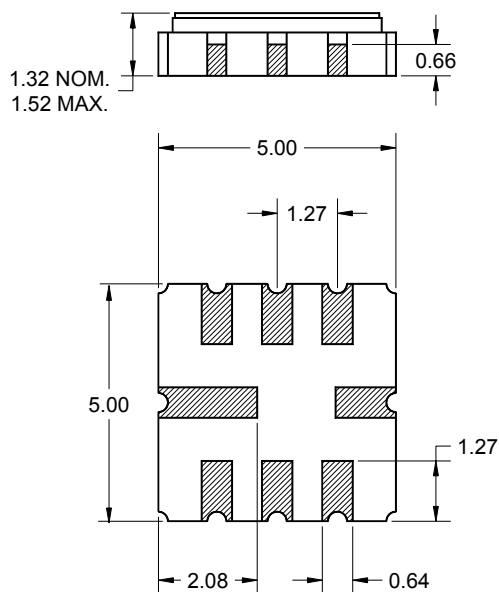
Features

- For WLAN applications
- Usable bandwidth of 17 MHz
- Low loss
- High attenuation
- No impedance matching required for operation at 250 Ω
- Balanced operation
- Ceramic Surface Mount Package (SMP)
- Small size



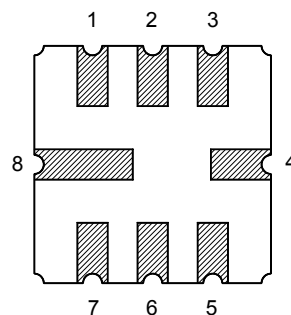
Package

Surface Mount 5.00 x 5.00 x 1.32 mm



Pin Configuration

Bottom View



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

Dimensions shown are nominal in millimeters
All tolerances are ± 0.15 mm except overall
length and width $+0.15/-0.10$ 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⁾ -10 to +70 °C

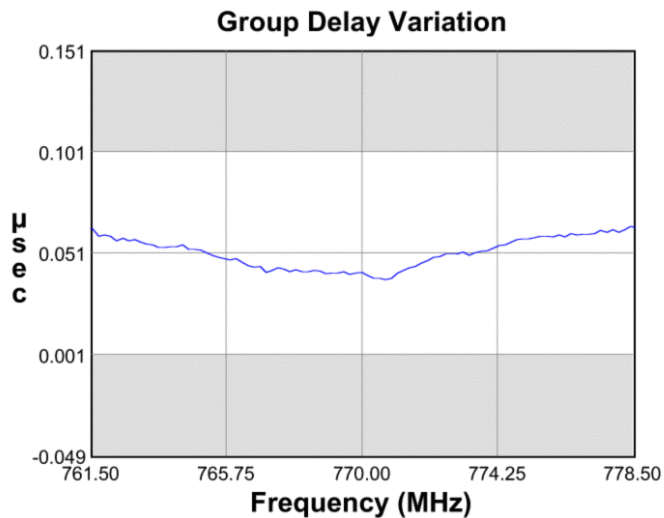
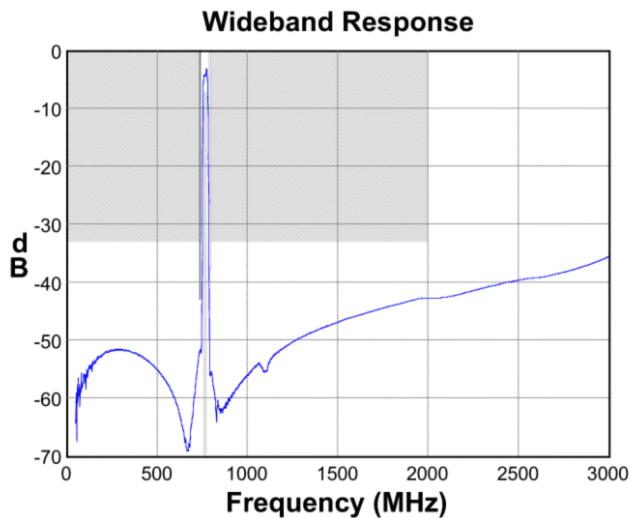
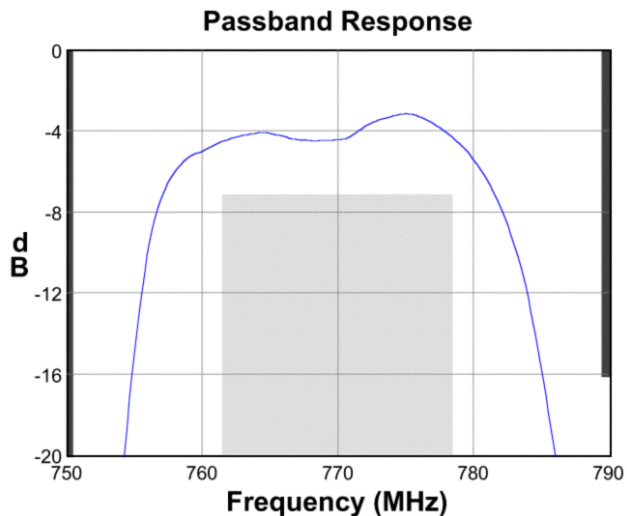
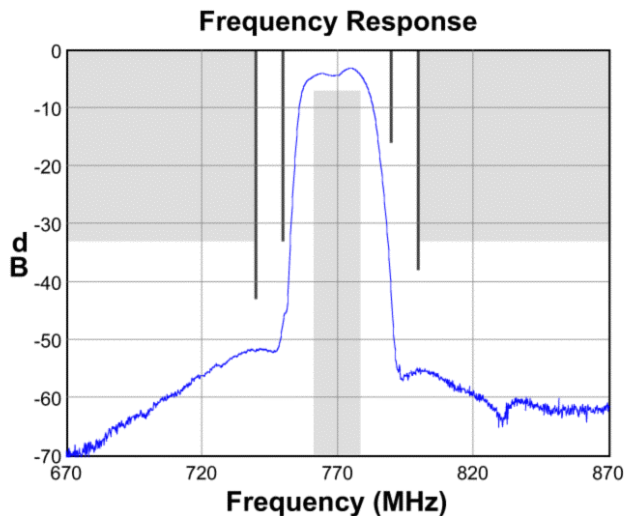
Parameter ⁽³⁾	Minimum	Typical	Maximum	Unit
Center Frequency	-	770	-	MHz
Minimum Insertion Loss	-	3.0	4	dB
Amplitude Variation 761.5 - 778.5 MHz	-	1.876	3.5	dB p-p
Amplitude Ripple 761.5 - 778.5 MHz	-	1.34	3.0	dB p-p
Group Delay 761.5 - 778.5 MHz	-	50	60	nsec
Group Delay Ripple 761.5 - 778.5 MHz	-	23	100	nsec
Absolute Attenuation ⁽⁴⁾				
740 MHz	40	47	-	MHz
750 MHz	30	45	-	MHz
790 MHz	13	31	-	MHz
800 MHz	35	51	-	MHz
Minimum Rejection ⁽⁴⁾				
1 - 370 MHz	30	46	-	dB
370 - 740 MHz	30	46.5	-	dB
800 - 1400 MHz	30	43.5	-	dB
1400 - 2000 MHz	30	37.75	-	dB
Source Impedance: ⁽⁵⁾	-	250	-	Ω
Load Impedance: ⁽⁵⁾	-	250	-	Ω

Notes:

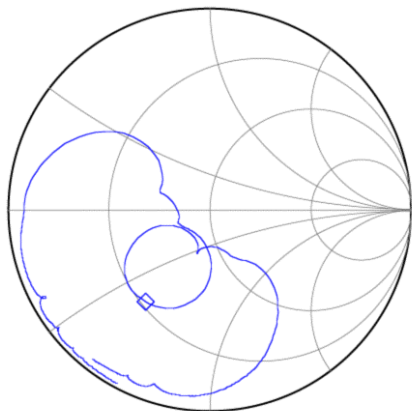
1. All specifications are based on the test circuit shown on page 4
2. In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over temperature
3. Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
4. Referenced to insertion loss at 770 MHz
5. This is the optimum impedance in order to achieve the performance shown

Preliminary Data Sheet

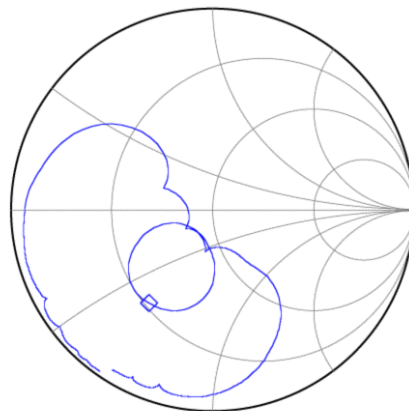
Typical Performance (at +25°C)



Input Smith Chart



Output Smith Chart

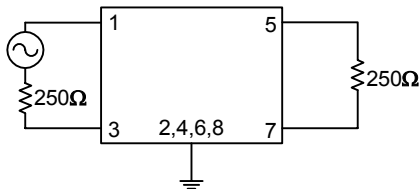


Preliminary Data Sheet

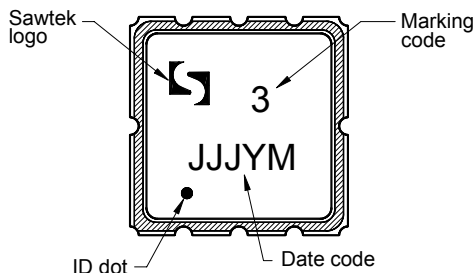
Matching Schematics

Actual matching values may vary due to PCB layout and parasitics

250Ω
Balanced

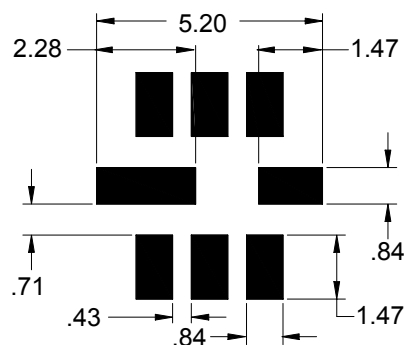


Marking



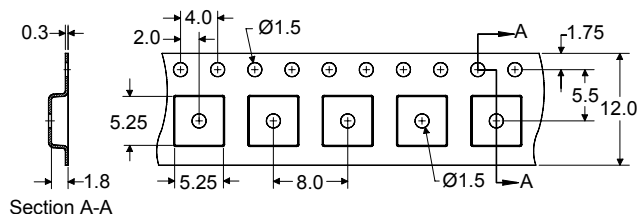
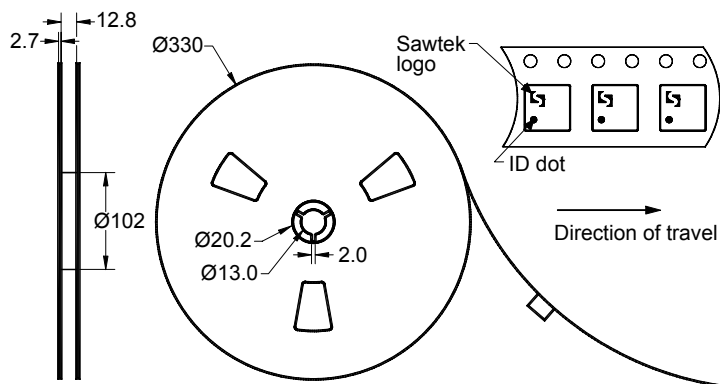
The date code consists of: JJJ = Julian day,
Y = last digit of year, M = manufacturing site code

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

Preliminary Data Sheet

Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Unit
Operating Temperature Range	T	-10	+70	°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](#)