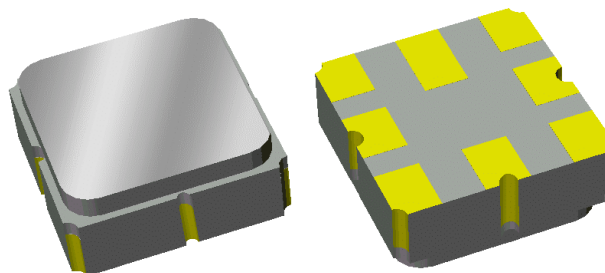


Preliminary Data Sheet

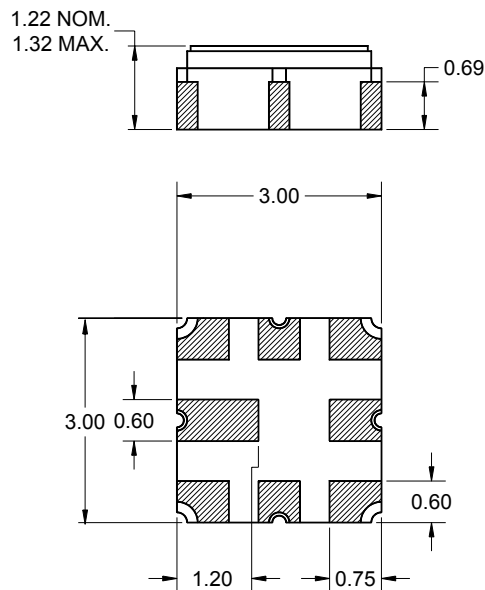
Features

- For broadband applications
- Usable bandwidth 10 MHz
- Low insertion loss
- No impedance matching required for operation at 200 Ω
- Balanced operation
- Ceramic Surface Mount Package (SMP)
- Small size



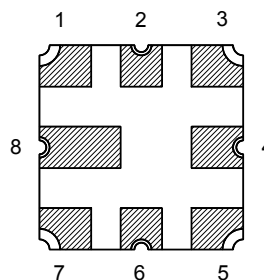
Package

Surface Mount 3.00 x 3.00 x 1.22 mm



Pin Configuration

Bottom View



Pin No.	Description
1	Input
3	Balanced input
5	Balanced output
7	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⁾ -40 to +85 °C

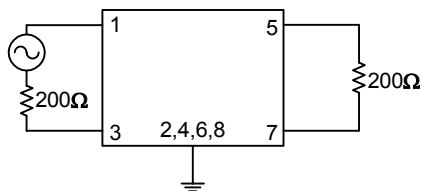
Parameter ⁽³⁾	Minimum	Typical	Maximum	Unit
Center Frequency	-	1220	-	MHz
Maximum Insertion Loss 1215 - 1225 MHz	-	3.5	5	dB
Lower 1.5 dB Bandedge ⁽⁴⁾	-	1207.855	1215	MHz
Upper 1.5 dB Bandedge ⁽⁴⁾	1225	1231.992	-	MHz
Amplitude Ripple ⁽⁵⁾ 1215 - 1225 MHz	-	1	1.5	dB p-p
Stopband Rejection ⁽⁴⁾				
500 - 1128 MHz	50	53	-	dB
1128 - 1136 MHz	50	53	-	dB
1172 - 1180 MHz	40	46	-	dB
1290 - 1600 MHz	40	50	-	dB
Group Delay Variation 1215 - 1225 MHz	-	15	-	nsec
Source Impedance ⁽⁶⁾	-	200	-	Ω
Load Impedance ⁽⁶⁾	-	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. Referenced to the minimum insertion loss of the device.
5. Amplitude ripple will measure the worst case peak to adjacent valley within the specified frequency points
6. This is the optimum impedance in order to achieve the performance shown

Test Circuit:

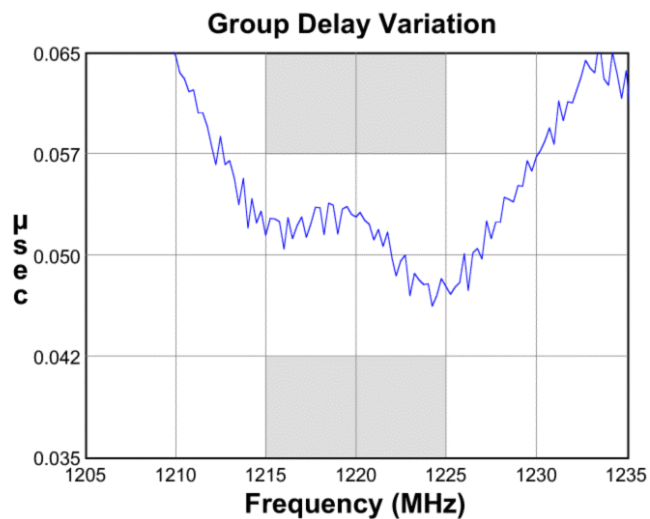
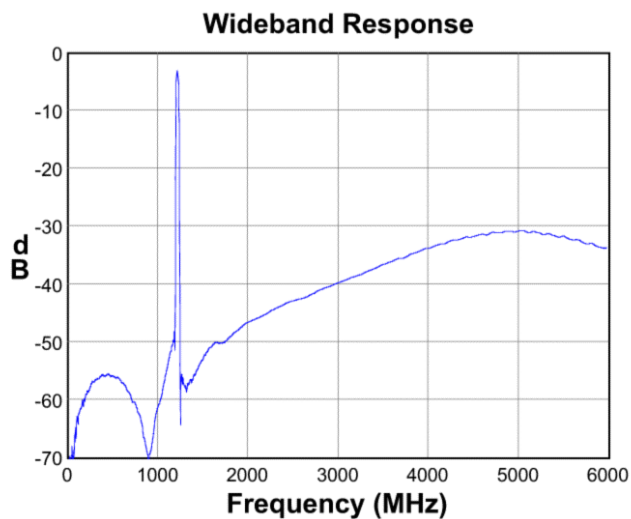
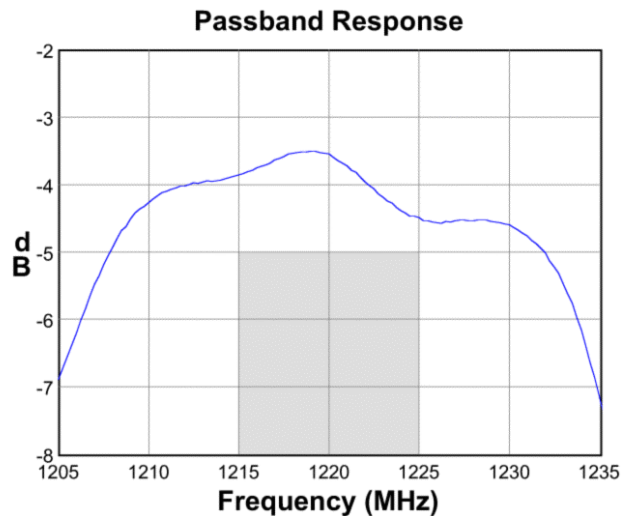
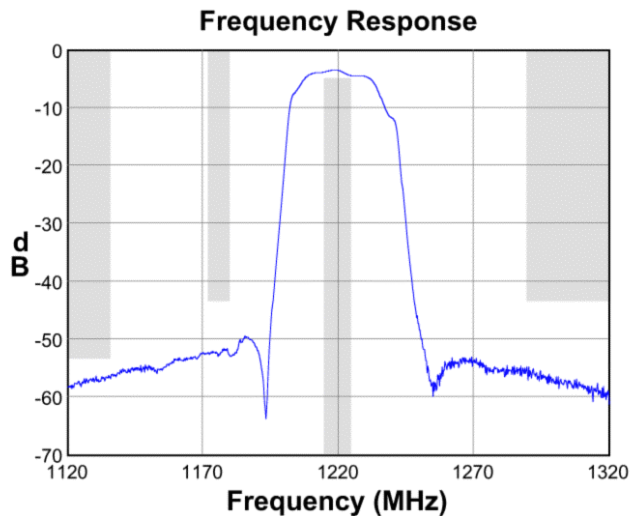
200 Ω
Balanced



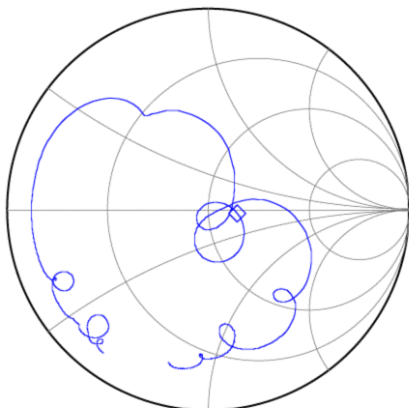
No impedance matching
required

Preliminary Data Sheet

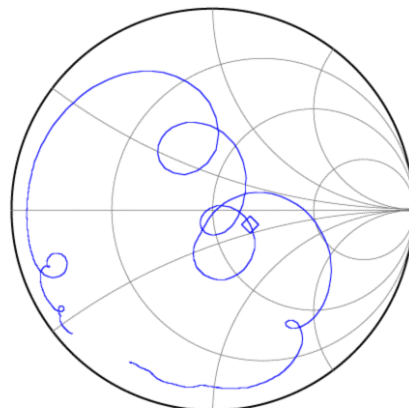
Typical Performance (at +25°C)



Input Smith Chart

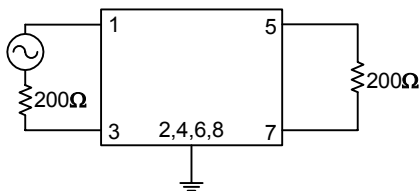


Output Smith Chart



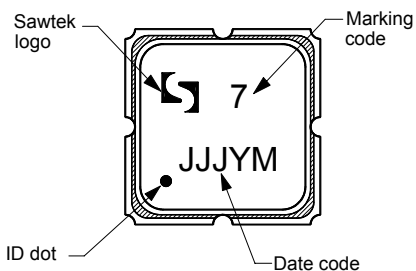
Matching Schematics

200 Ω
Balanced



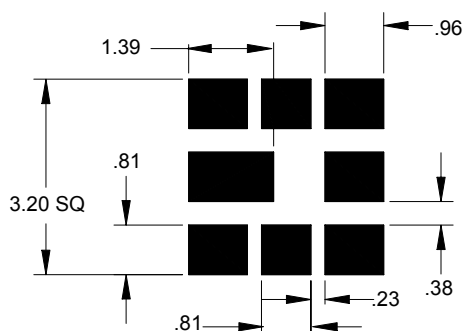
No impedance matching
required

Marking



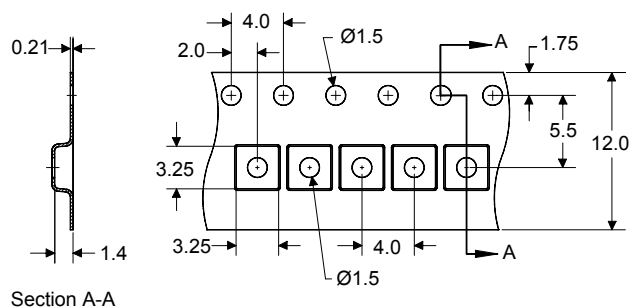
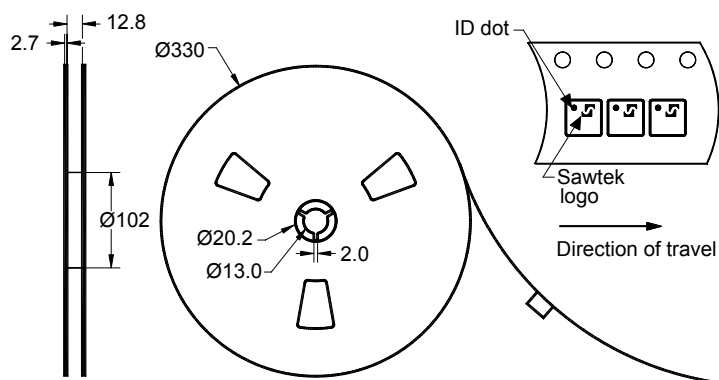
The date code consists of: JJJ = Julian day,
Y = last digit of year, M = manufacturing site code

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: 5000 units/reel

Preliminary Data Sheet

Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Unit
Operating Temperature Range	T	-40	+85	°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](#)