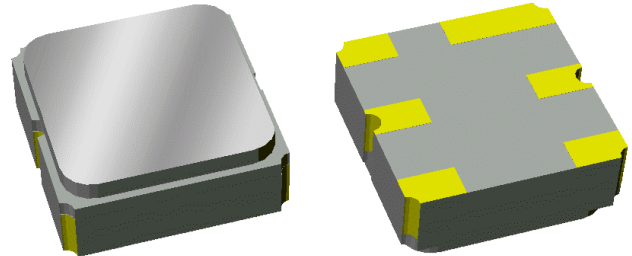


Data Sheet

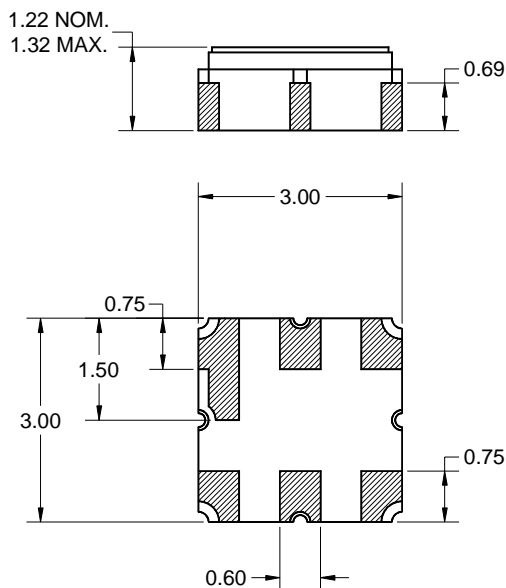
Features

- For GPS applications
- Usable bandwidth 2.4 MHz
- Low loss
- No impedance matching required for operation at 50 Ω
- Single-ended operation
- Ceramic Surface Mount Package (SMP)
- Small size

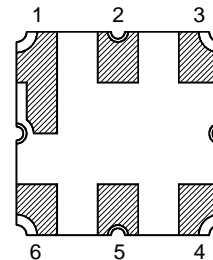


Package

Surface Mount 3.0 x 3.0 x 1.22 mm



Pin Configuration



Pin No.	Description
2,5	Input/Output
1,3,4,6	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

Data Sheet

Electrical Specifications ⁽¹⁾

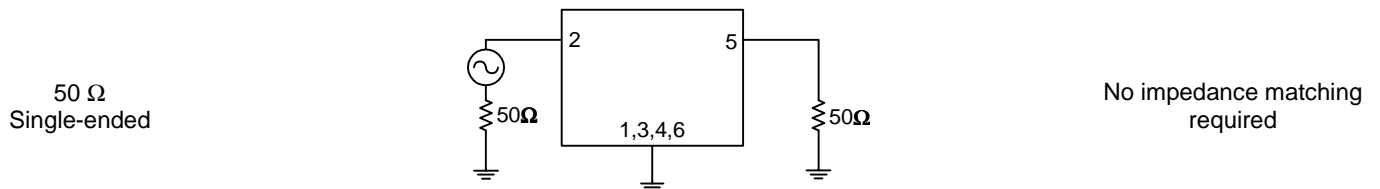
Operating Temperature Range: ⁽²⁾ -40 to +85 °C

Parameter ⁽³⁾	Minimum	Typical	Maximum	Unit
Center Frequency	-	1575.42	-	MHz
Maximum Insertion Loss 1574.22 - 1576.62 MHz	-	1.3	1.8	dB
Passband Ripple 1574.22 - 1576.62 MHz	-	0.3	1	dB p-p
Absolute Attenuation				
10 - 1450 MHz	40	42	-	dB
1450 - 1500 MHz	30	45	-	dB
1625 - 1640 MHz	30	58	-	dB
1640 - 2000 MHz	45	49	-	dB
2000 - 3000 MHz	30	35	-	dB
Input/Output VSWR 1574.22 - 1576.62 MHz	-	1.2:1	2:1	dB
Terminating Source Impedance: ⁽⁴⁾	-	50	-	Ω
Terminating Load Impedance: ⁽⁴⁾	-	50	-	Ω
Operating Temperature Range	-40	+25	+85	°C

Notes:

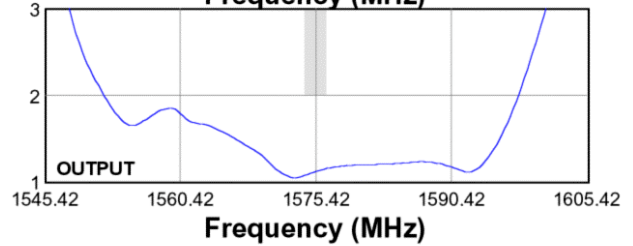
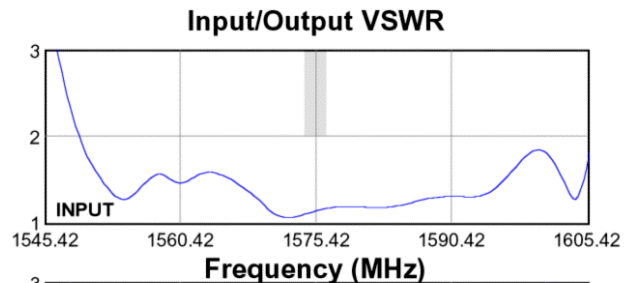
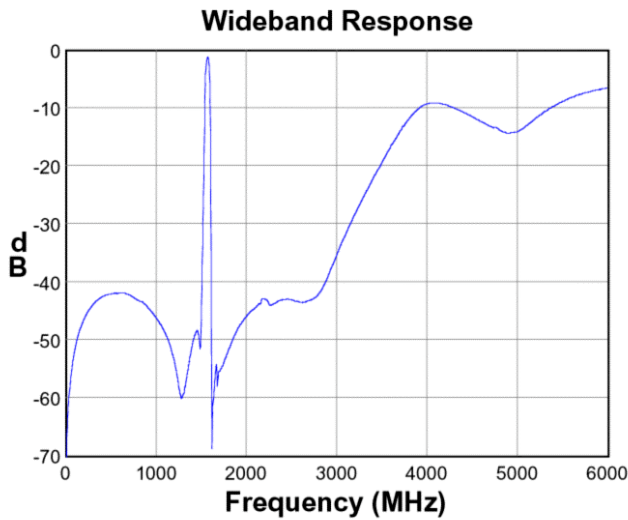
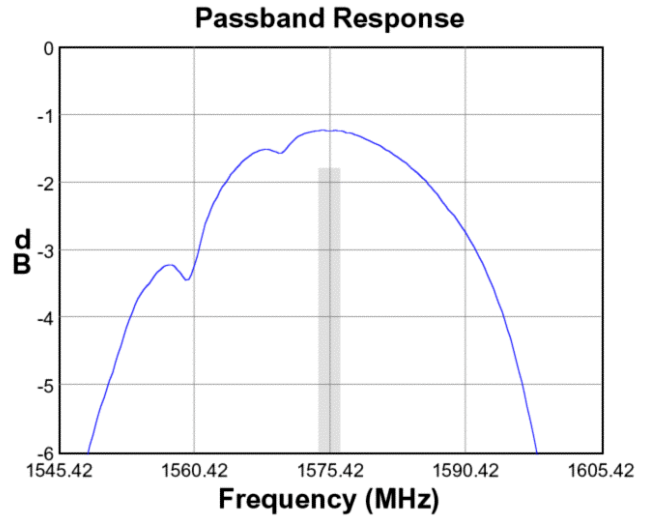
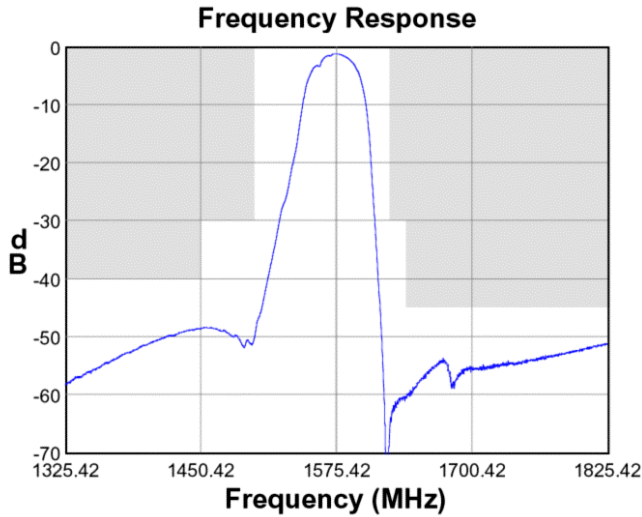
1. All specifications are based on the test circuit shown below
2. In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over temperature
3. Electrical margin has been built into the design to account for the variations due to temperature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

Test Circuit:

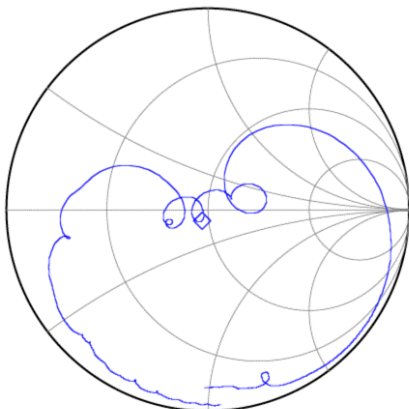


Data Sheet

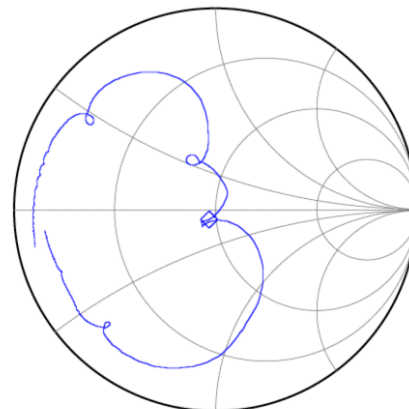
Typical Performance (at +25°C)



Input Smith Chart



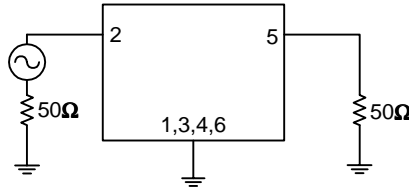
Output Smith Chart



Data Sheet

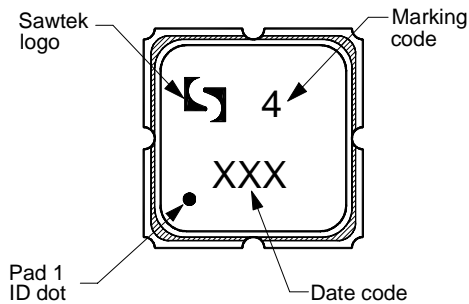
Matching Schematics

50 Ω
Single-ended

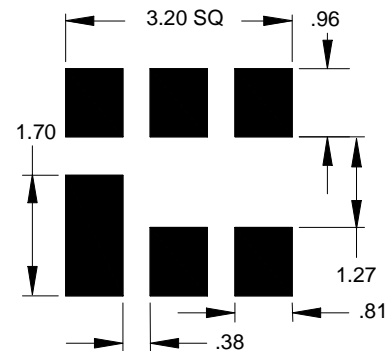


No impedance matching required

Marking



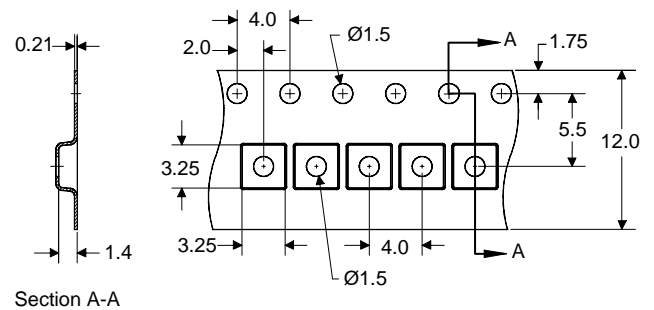
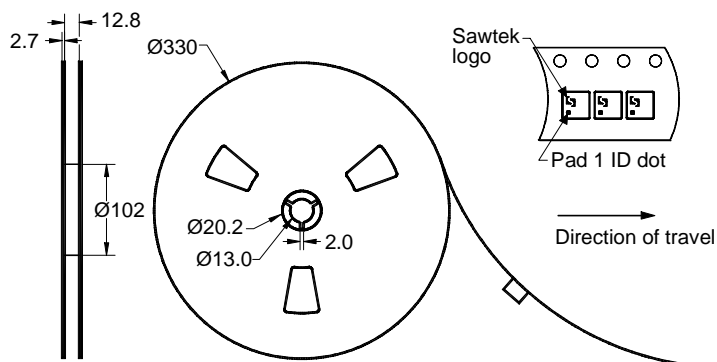
PCB Footprint



Date code is the day of the current year in 3-digit Julian format

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

Data Sheet

Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Unit
Operating Temperature Range	T	-40	+85	°C
Storage Temperature Range	T _{stg}	-40	+85	°C
RF Power	P _{in}	-	+10	dBm

Warnings

- Electrostatic Sensitive Device (ESD) 
- Avoid ultrasonic exposure

Links to Additional Technical Information

[PCB Layout Tips](#)

[Qualification Flowchart](#)

[Soldering Profile](#)

[S-Parameters](#)

[Reel and Packaging Label](#)

[Other Technical Information](#)

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[Representatives or distributors](#)