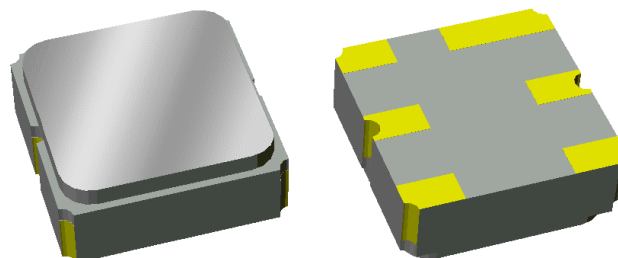


Preliminary Data Sheet

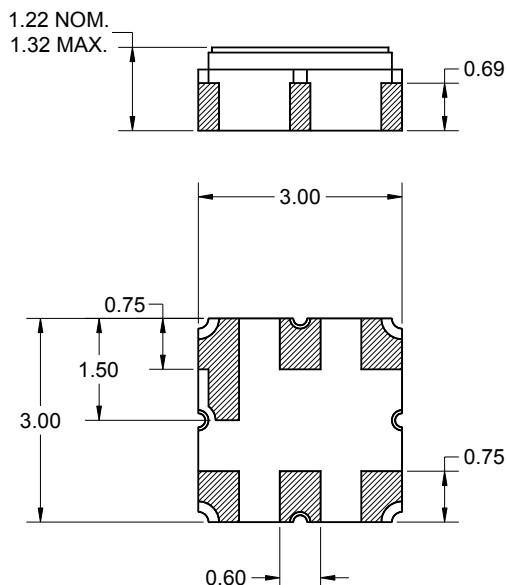
Features

- For ISM band applications (such as Bluetooth and WLAN)
- Usable bandwidth 83.5 MHz
- High attenuation
- No impedance matching required for operation at 50 Ω
- Single-ended operation
- Ceramic Surface Mount Package (SMP)
- Small size



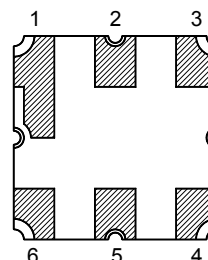
Package

Surface Mount 3.00 x 3.00 x 1.22 mm



Pin Configuration

Bottom View



Pin No.	Description
2	Input
5	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

Preliminary Data Sheet

Electrical Specifications ⁽¹⁾

Operating Temperature Range: ⁽²⁾ 0 to +60 °C

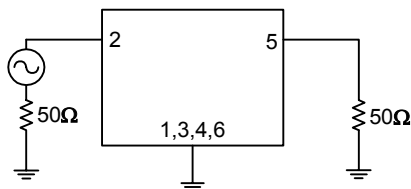
Parameter ⁽³⁾	Minimum	Typical	Maximum	Unit
Center Frequency	-	2441.8	-	MHz
Maximum Insertion Loss 2400 - 2483.5 MHz	-	2.76	5.0	dB
Absolute Attenuation				
0.3 - 500 MHz	25	34	-	dB
500 - 1000 MHz	20	29	-	dB
1000 - 1700 MHz	20	26.8	-	dB
1700 - 2200 MHz	20	26.9	-	dB
2700 - 3100 MHz	20	30.5	-	dB
3100 - 4000 MHz	20	31.8	-	dB
4000 - 5000 MHz	10	20	-	dB
Input VSWR 2400 - 2483.5 MHz	-	2.75	4.55:1	Ratio
Output VSWR 2400 - 2483.5 MHz	-	2.68	5.7:1	Ratio
Passband Ripple 2400 - 2483.5 MHz	-	1.2	2.5	dB p-p
Source Impedance: ⁽⁴⁾	-	50	-	Ω
Load Impedance: ⁽⁴⁾	-	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. This is the optimum impedance in order to achieve the performance shown

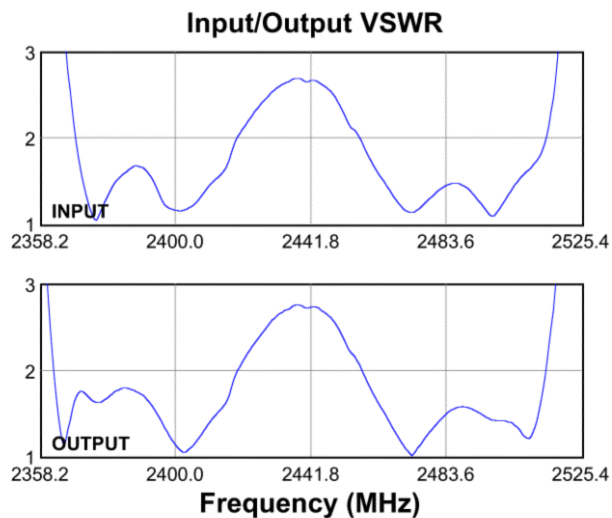
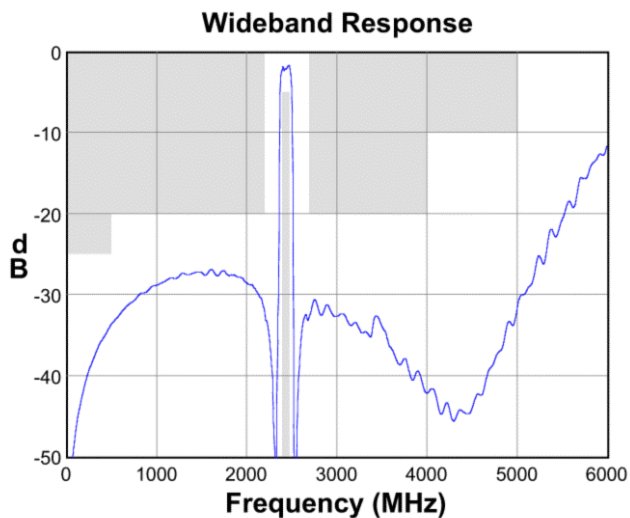
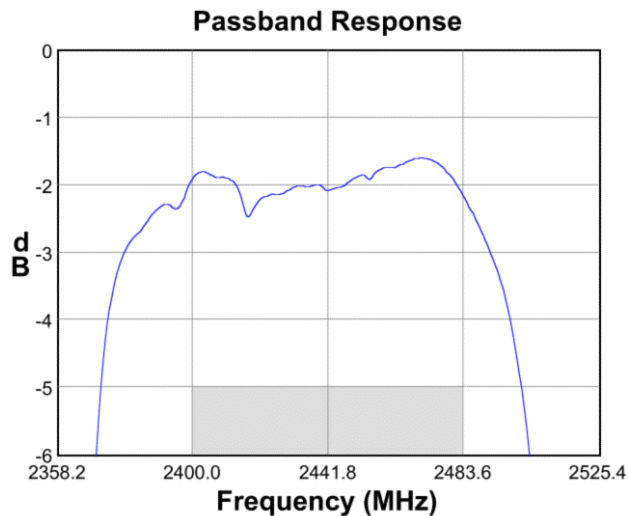
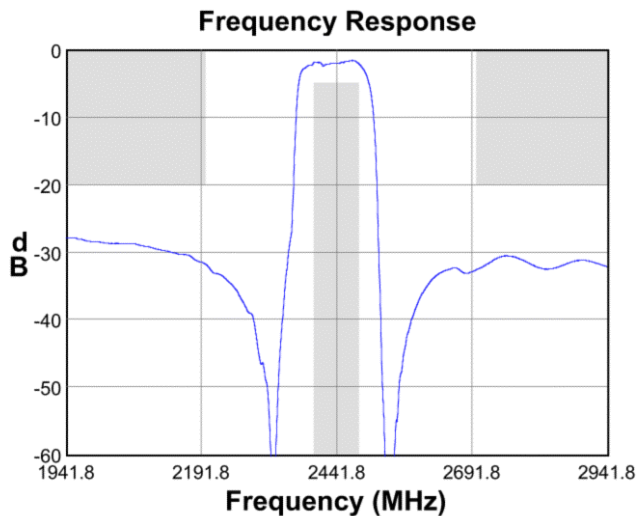
Test Circuit:

50 Ω
Single-ended

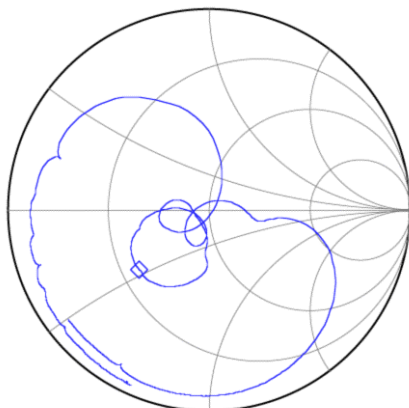


No impedance matching
required

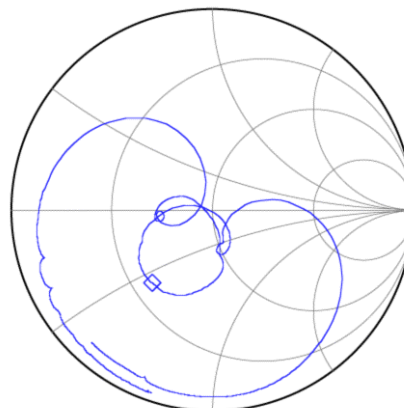
Typical Performance (at +25°C)



Input Smith Chart

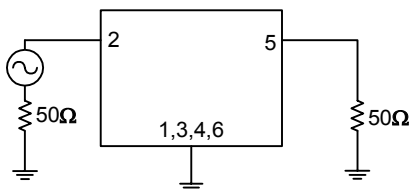


Output Smith Chart



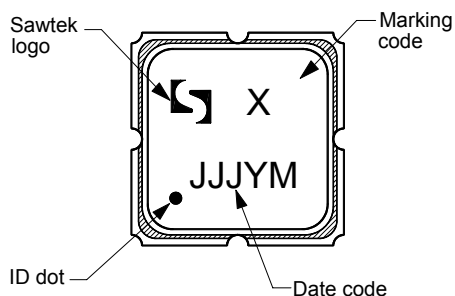
Matching Schematics

50 Ω
Single-ended



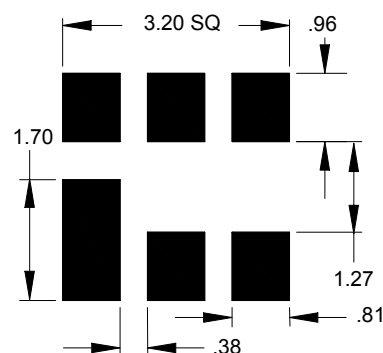
No impedance matching
required

Marking



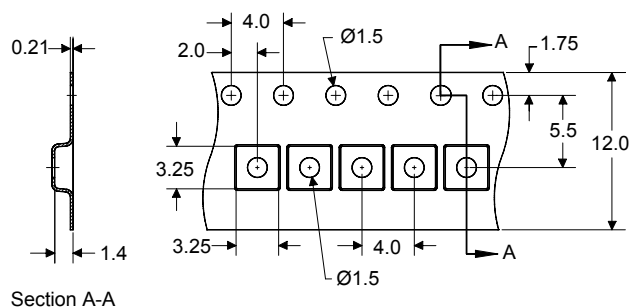
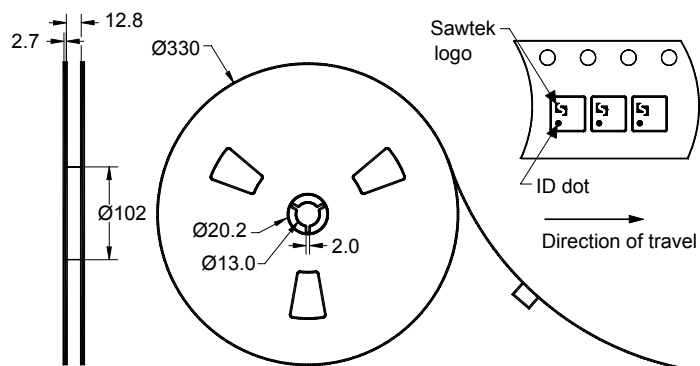
The date code consists of: JJJ = Julian day,
Y = last digit of year, M = manufacturing site code

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	0	+60	°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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network of [sales offices](#),
[representatives or distributors](#)