
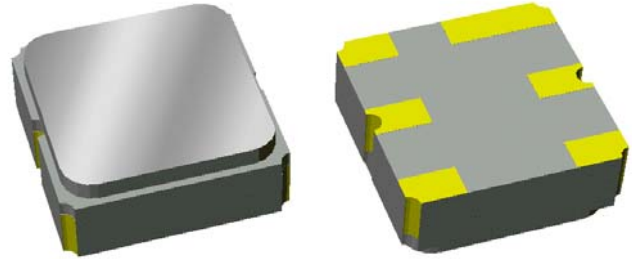


**Data Sheet**

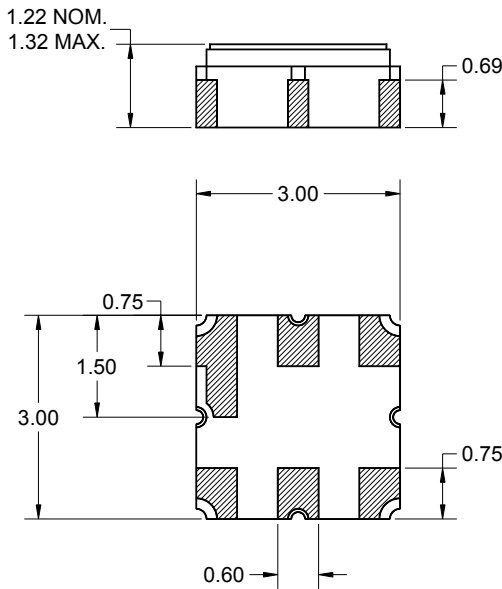
**Features**

- For AMPS, CDMA and TDMA applications
- Usable bandwidth 25 MHz
- High attenuation
- No impedance matching required for operation at 50 Ω
- Single-ended operation
- Ceramic Surface Mount Package (SMP)
- Hermetic
- RoHS compliant (2002/95/EC), Pb-free 



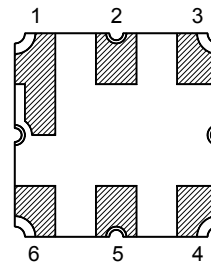
**Package**

Surface Mount 3.00 x 3.00 x 1.22 mm



**Pin Configuration**

Bottom View



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

Dimensions shown are nominal in millimeters  
All tolerances are ±0.15mm except overall length and width ±0.10mm

Body:  $Al_2O_3$  ceramic  
Lid: Kovar, Ni plated  
Terminations: Au plating 0.5 - 1.0µm, over a 2 - 6µm Ni plating

**Data Sheet**

**Electrical Specifications <sup>(1)</sup>**

Operating Temperature Range: <sup>(2)</sup> -30 to +85 °C

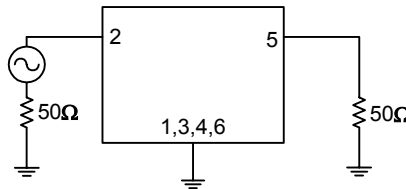
Parameter <sup>(3)</sup>	Minimum	Typical	Maximum	Unit
<b>Center Frequency</b>	-	836.5	-	MHz
<b>Maximum Insertion Loss</b> 824 - 849 MHz	-	2.7	3.5	dB
<b>Amplitude Variation</b> 824 - 849 MHz	-	0.85	1.5	dB p-p
<b>Absolute Attenuation</b> DC - 800 MHz	40	50	-	dB
869 - 925 MHz	28	33	-	dB
925 - 2000 MHz	40	45	-	dB
<b>Input/Output Return Loss</b> 824 - 849 MHz	9.5	13.6	-	dB
<b>Source Impedance:</b> <sup>(4)</sup>	-	50	-	Ω
<b>Load Impedance:</b> <sup>(4)</sup>	-	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:**

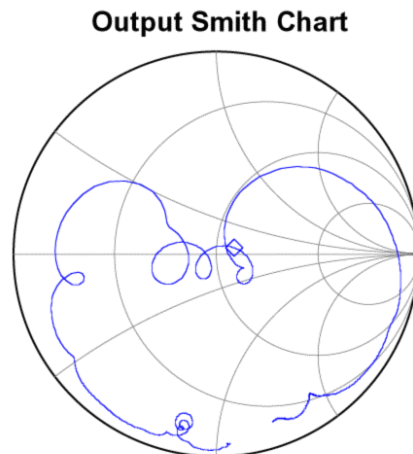
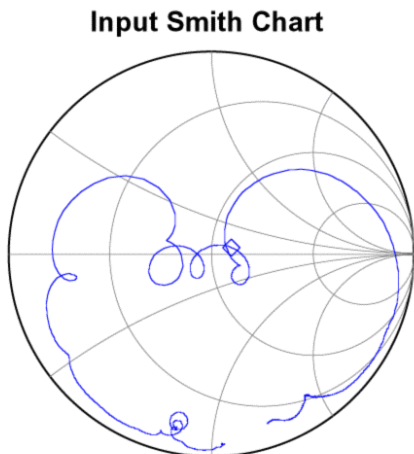
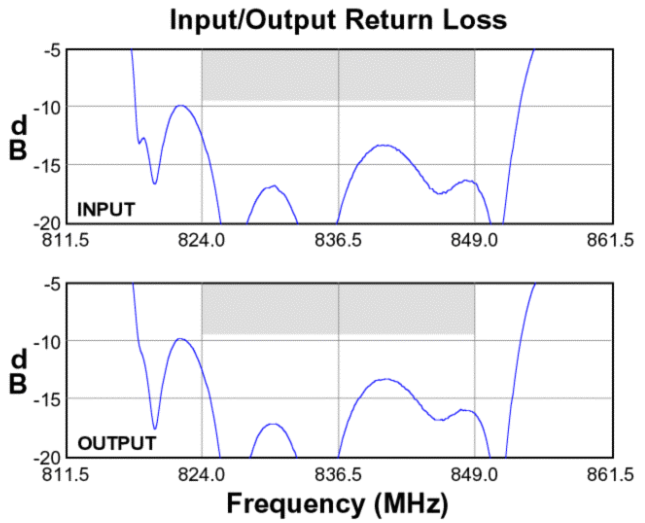
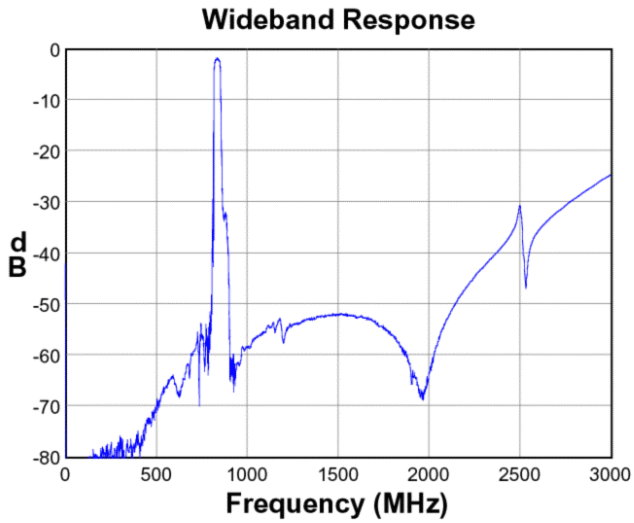
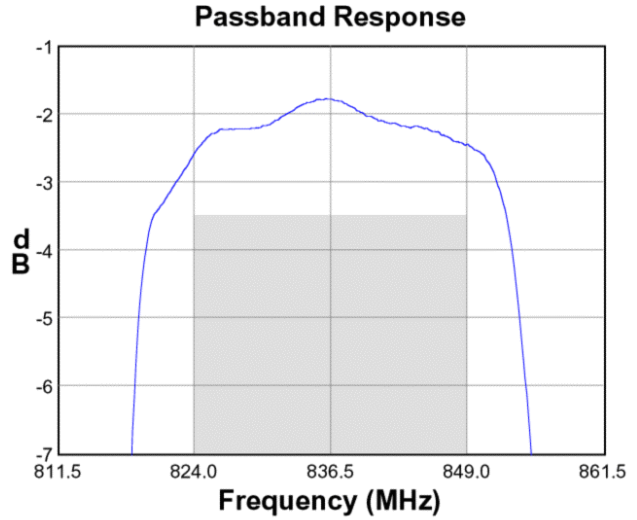
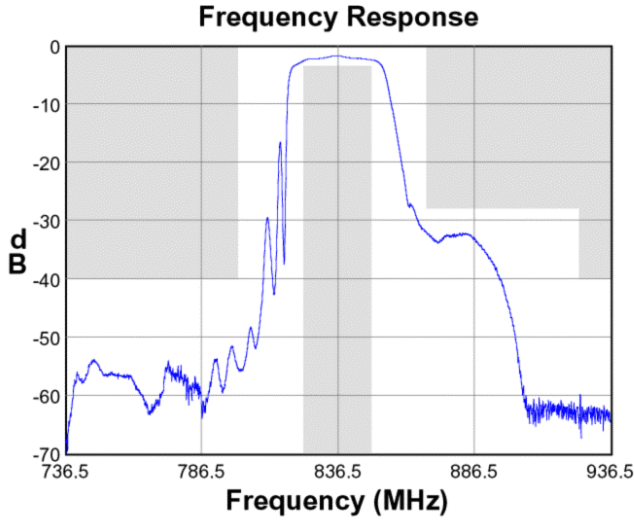
50 Ω  
Single-ended



No impedance matching  
required

**Data Sheet**

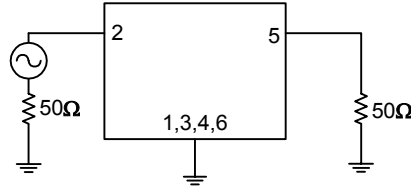
**Typical Performance (at +25°C)**



**Data Sheet**

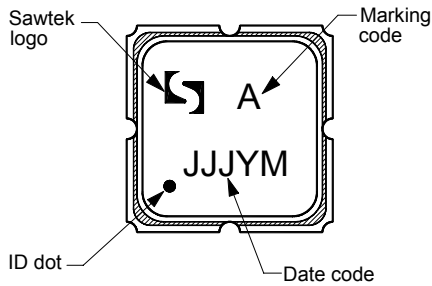
**Matching Schematics**

50 Ω  
Single-ended



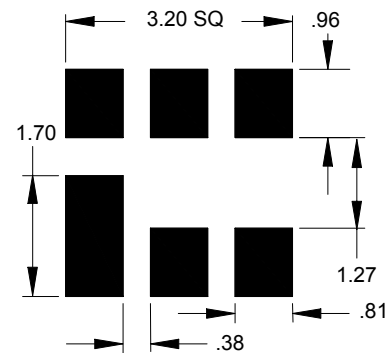
No impedance matching required

**Marking**



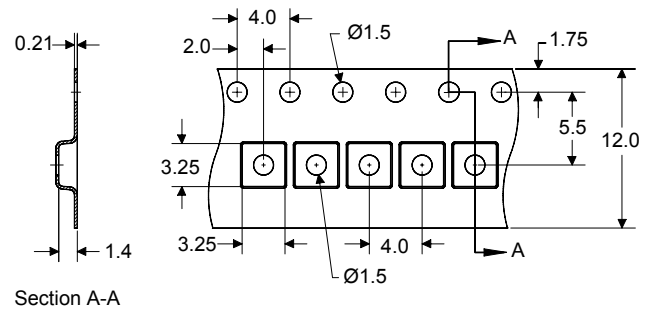
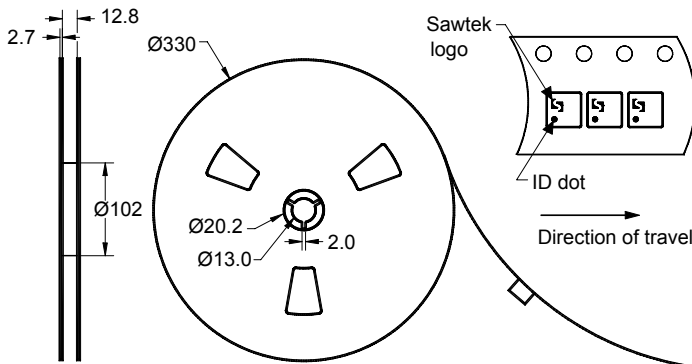
The date code consists of: JJJ = Julian day,  
Y = last digit of year, M = manufacturing site code

**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


# Data Sheet

## Maximum Ratings


Parameter	Symbol	Minimum	Maximum	Unit
Operating Temperature Range	T	-30	+85	°C
Storage Temperature Range	T <sub>stg</sub>	-40	+85	°C
RF Power	P <sub>in</sub>	-	+10	dBm

## Important Notes

### Warnings

- Electrostatic Sensitive Device (ESD) 
- Avoid ultrasonic exposure

### RoHS Compliance

- This product complies with EU directive 2002/95/EC (RoHS) 

### Solderability

- Compatible with JEDEC J-STD-020C **Pb**-free process, **260°C** peak reflow temperature ([see soldering profile](#))

## Links to Additional Technical Information

[PCB Layout Tips](#)

[Qualification Flowchart](#)

[Soldering Profile](#)

[S-Parameters](#)

[RoHS Information](#)

[Other Technical Information](#)

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