
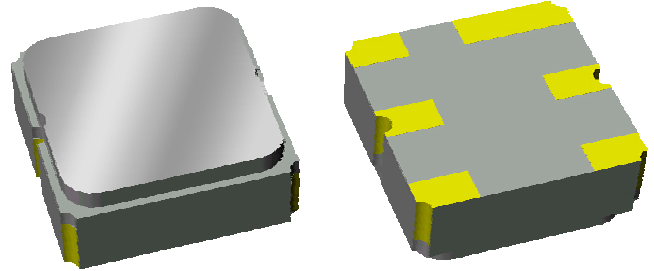


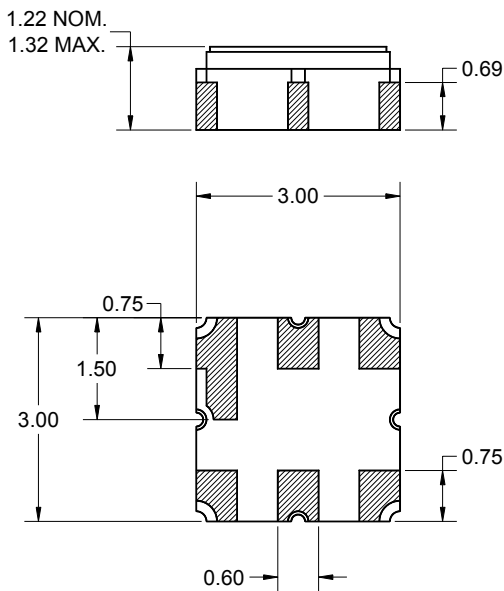
Features

- For wireless applications
- Usable bandwidth of 19 MHz
- Low loss
- High attenuation
- No impedance matching required for operation at 50Ω
- Single-ended operation
- Ceramic Surface Mount Package (SMP)
- Hermetic
- RoHS compliant (2002/95/EC), Pb-free 



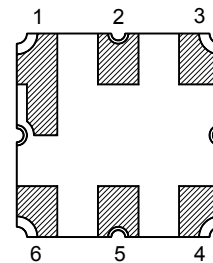
Package

Surface Mount 3.00 x 3.00 x 1.22 mm



Pin Configuration

Bottom View



Pin No.	Description
2	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 - 1.0μm,
over a 2 - 6μm Ni plating

Electrical Specifications ⁽¹⁾

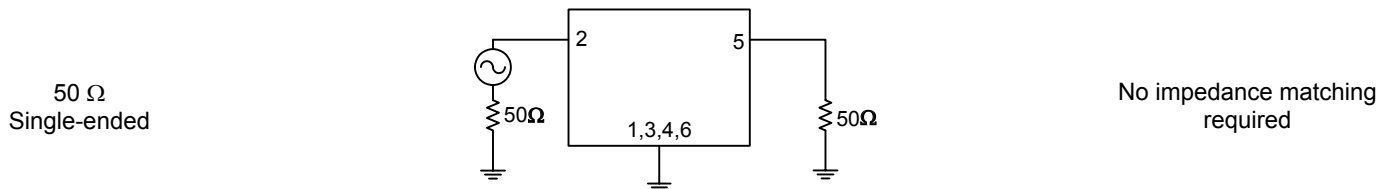
Operating Temperature Range: ⁽²⁾ -30 to +85 °C

Parameter ⁽³⁾	Minimum	Typical	Maximum	Unit
Center Frequency (Fo)	-	860.5	-	MHz
Maximum Insertion Loss 851 - 870 MHz	-	1.1	2.5	dB
Amplitude Ripple ⁽⁴⁾ 851 - 870 MHz	-	0.5	1.5	dB
Absolute Attenuation				
DC - 650 MHz	30	38	-	dB
650 - 760 MHz	25	36	-	dB
760 - 815 MHz	25	31	-	dB
905 - 950 MHz	10	20	-	dB
950 - 2000 MHz	25	29	-	dB
Input/Output VSWR 851 - 870 MHz	-	1.4	2	-
Source Impedance ⁽⁵⁾	-	50	-	Ω
Load Impedance ⁽⁵⁾	-	50	-	Ω

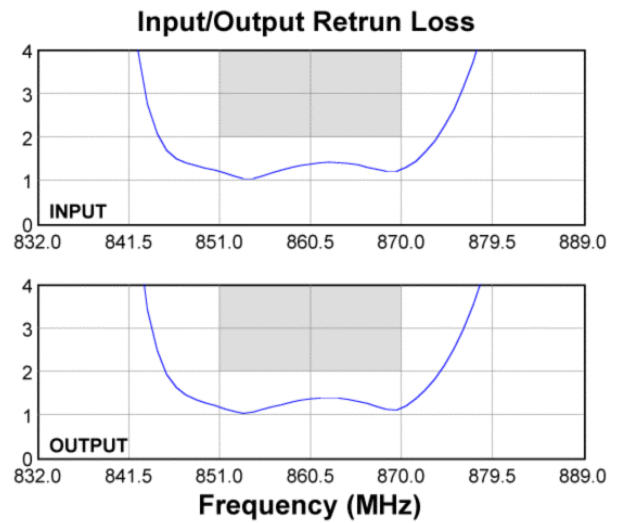
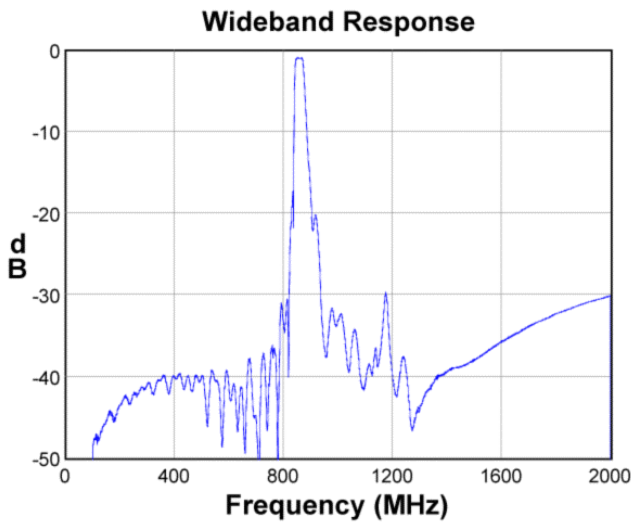
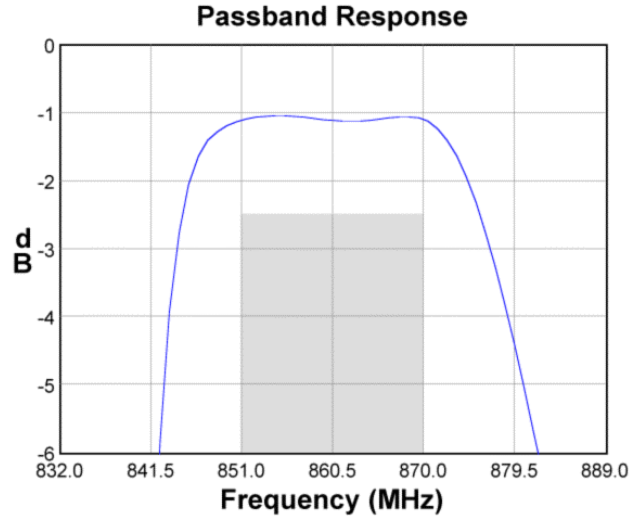
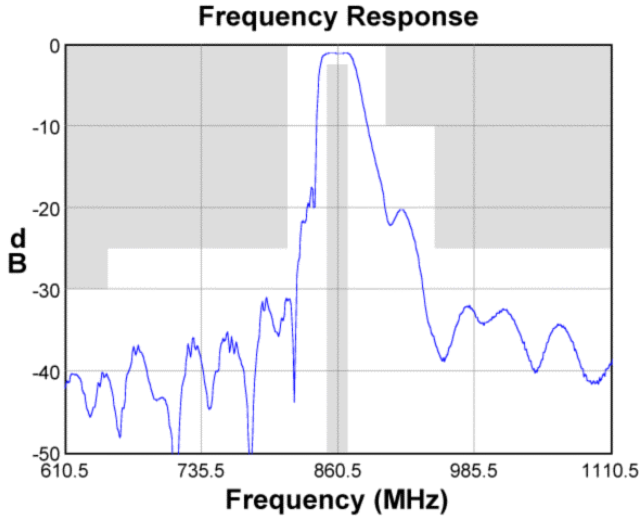
Notes:

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. Amplitude Ripple is defined as the worst-case difference between a peak and an adjacent valley within defined frequency points
5. This is the optimum impedance in order to achieve the performance shown

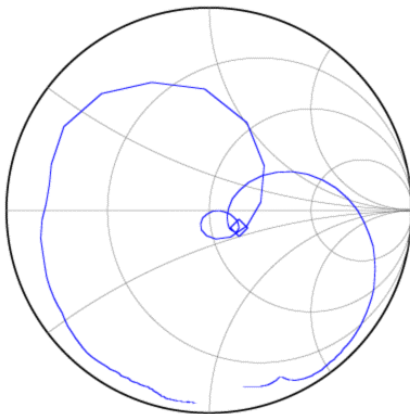
Test Circuit:



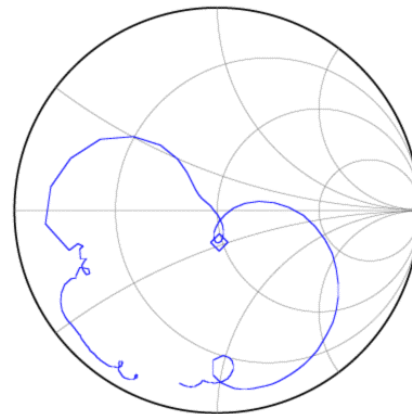
Typical Performance (at +25°C)



Input Smith Chart

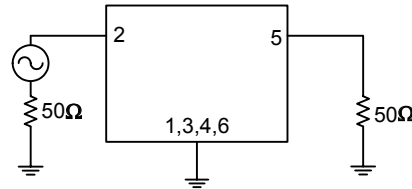


Output Smith Chart



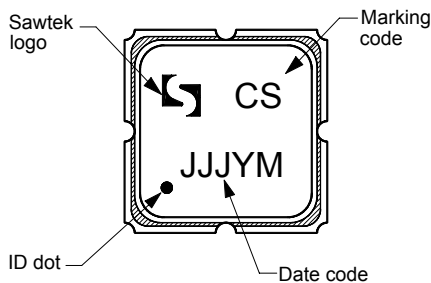
Matching Schematics

50 Ω
Single-ended



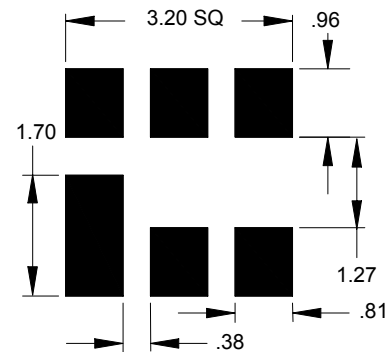
No impedance matching required

Marking



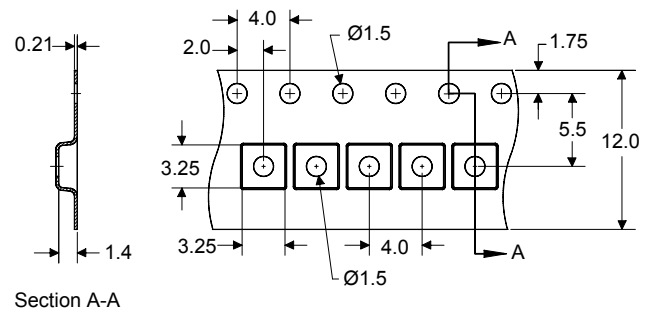
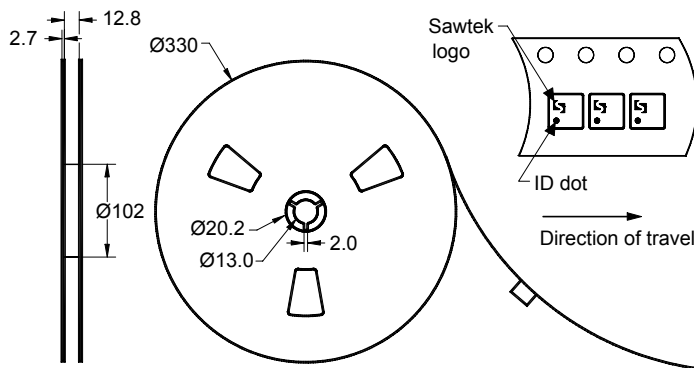
The date code consists of: JJJ = Julian day,
Y = last digit of year, M = manufacturing site code

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

Maximum Ratings


Parameter	Symbol	Minimum	Maximum	Unit
Operating Temperature Range	T	-30	+85	°C
Storage Temperature Range	T _{stg}	-40	+85	°C
Power Handling (5000 hours at 25°C)	P _{in}	-	+15	dBm
ESD HBM (per JESD22-A114)	V _{ESD}	300	-	V
ESD MM (per JESD22-A115)	V _{ESD}	200	-	V

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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