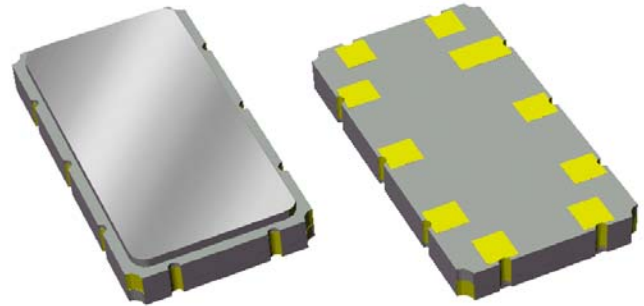


Preliminary Data Sheet

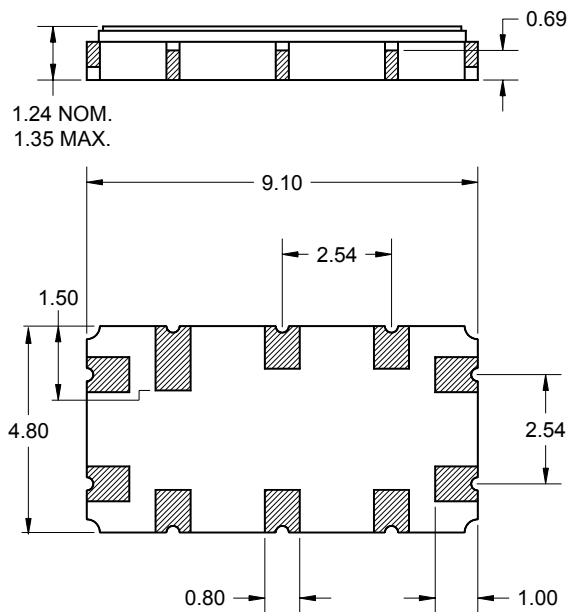
Features

- For wireless broadband applications
- Usable bandwidth 0.8 MHz
- Low loss
- High attenuation
- Single or Balanced operation
- Ceramic Surface Mount Package (SMP)
- Small size



Package

Surface Mount 9.10 x 4.80 x 1.24 mm

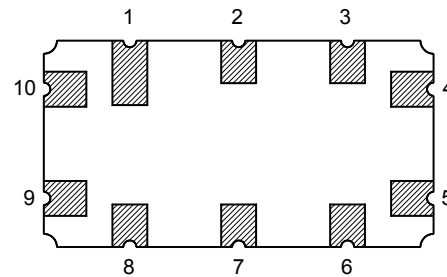


Dimensions shown are nominal in millimeters
 All tolerances are ± 0.15 mm except overall
 length and width $+0.10$ mm/ -0.10 mm

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

Pin Configuration

Bottom View



Pin No.	Description
4	Input
5	Input Return
9	Output
10	Output Return
1,2,3,6,7,8	Case Ground

Preliminary Data Sheet

Electrical Specifications ⁽¹⁾

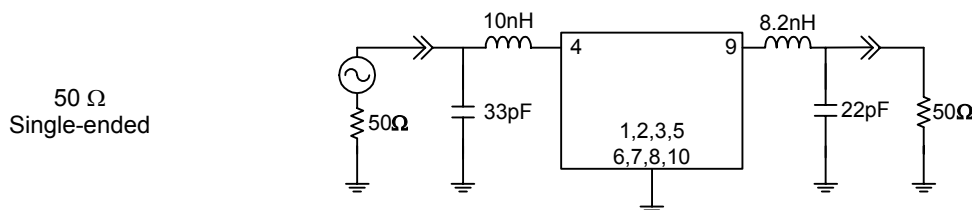
Operating Temperature Range: ⁽²⁾ -20 to +70 °C

Parameter ⁽³⁾	Minimum	Typical	Maximum	Unit
Center Frequency	-	350		MHz
Insertion Loss at 350 MHz ⁽⁴⁾	-	8	11	dB
1 dB Lower Bandedge	-	349.39	349.6	MHz
1 dB Upper Bandedge	350.4	350.60	-	MHz
1 dB Bandwidth	0.8	1.21	-	MHz
15 dB Lower Bandedge	348.9	349.07	-	MHz
15 dB Upper Bandedge	-	350.89	351.1	MHz
15 dB Bandwidth	-	1.82	2.2	MHz
40 dB Lower Bandedge	347.3	347.54	-	MHz
40 dB Upper Bandedge	-	352.41	352.7	MHz
40 dB Bandwidth	-	4.87	5.4	MHz
Group Delay Variation 349.6 - 350.4 MHz	-	135	200	nsec
Optimal Source Impedance ⁽⁵⁾	-	50	-	Ω
Optimal 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. Relative to insertion loss at 350MHz
5. This is the optimum impedance in order to achieve the performance shown

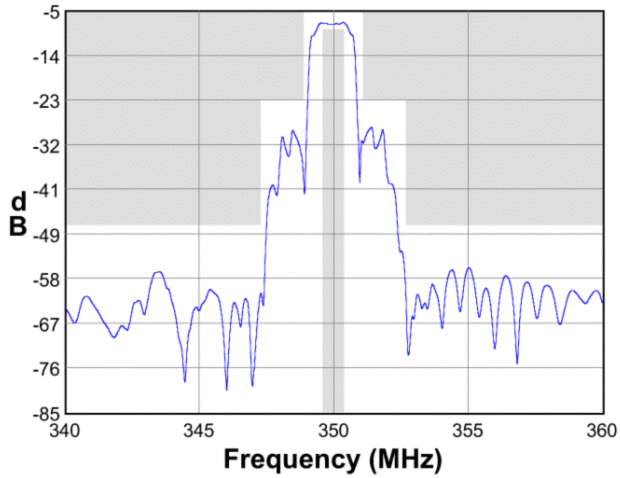
Test Circuit:



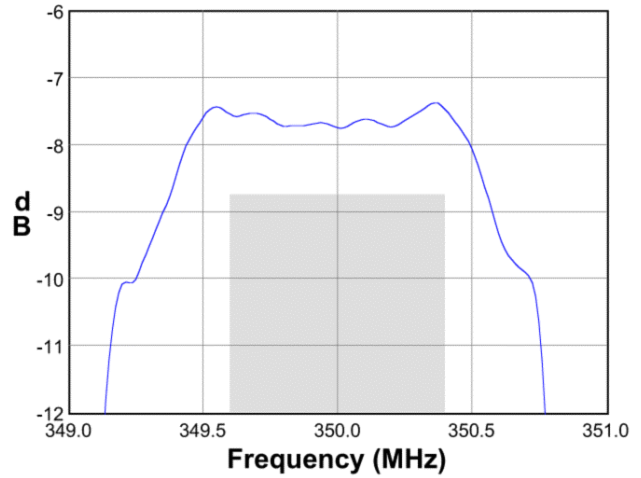
Preliminary Data Sheet

Typical Performance (at +25°C)

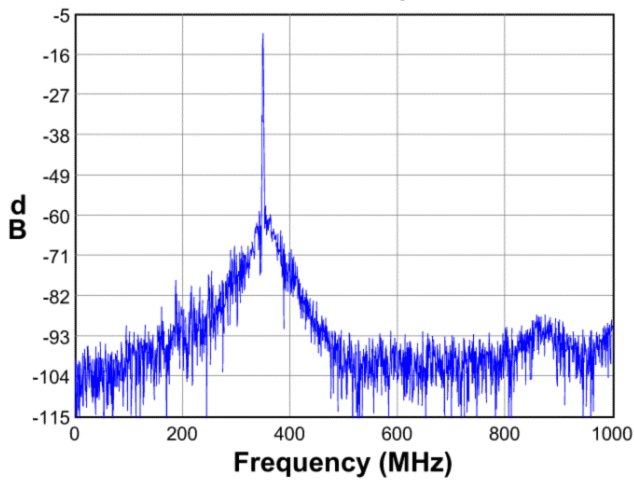
Frequency Response



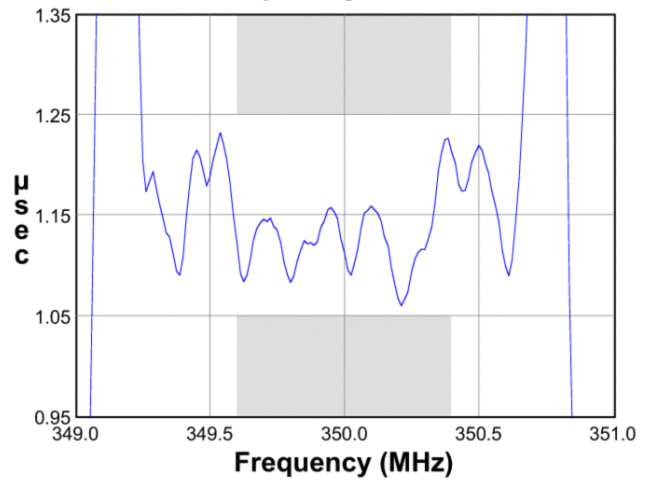
Passband Response



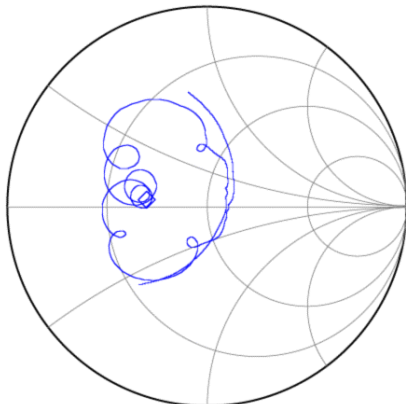
Wideband Response



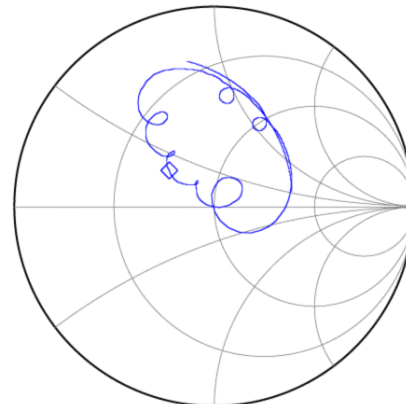
Group Delay Variation



Input Smith Chart



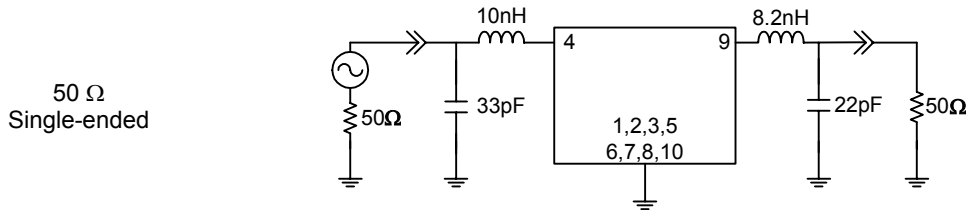
Output Smith Chart



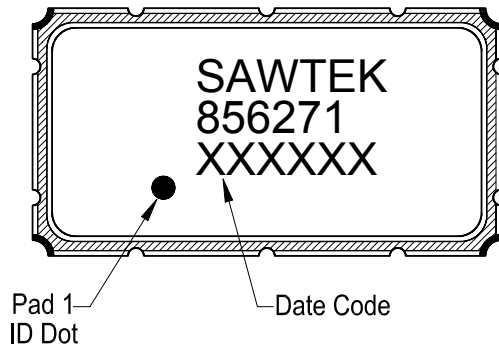
Preliminary Data Sheet

Matching Schematics

Actual matching values may vary due to PCB layout and parasitics

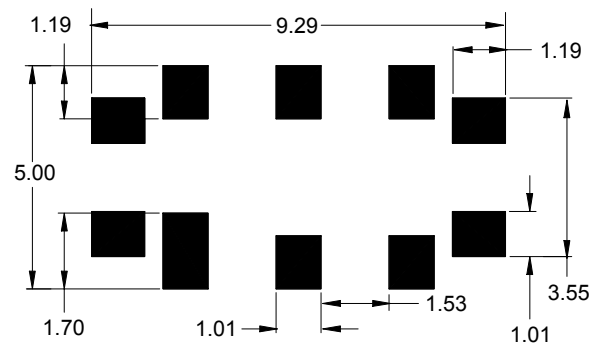


Marking



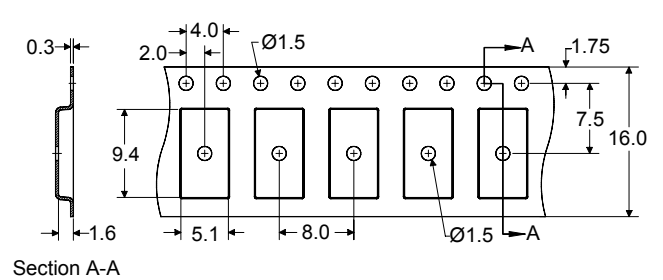
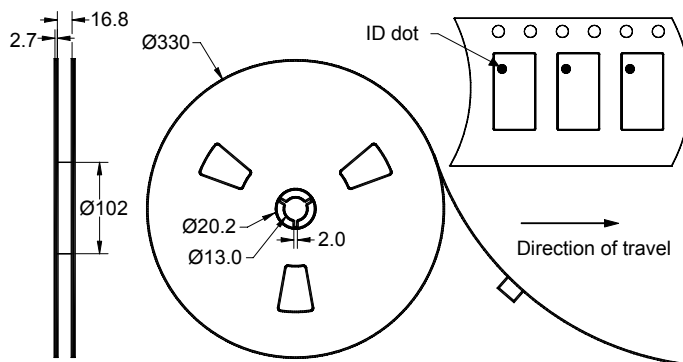
The date code consists of: day of the current year (Julian, 3 digits), last digit of the year (1 digit) and hour (2 digits)

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: 4000 units/reel

Preliminary Data Sheet

Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Unit
Operating Temperature Range	T	-20	+70	°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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