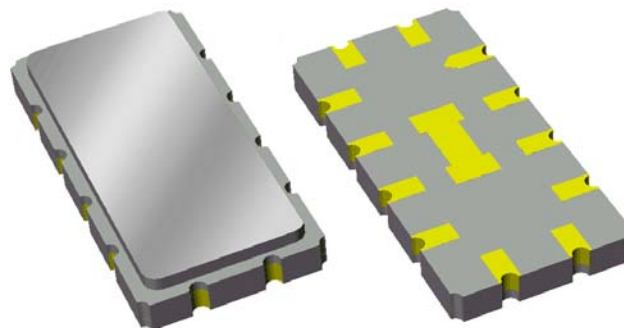


Data Sheet

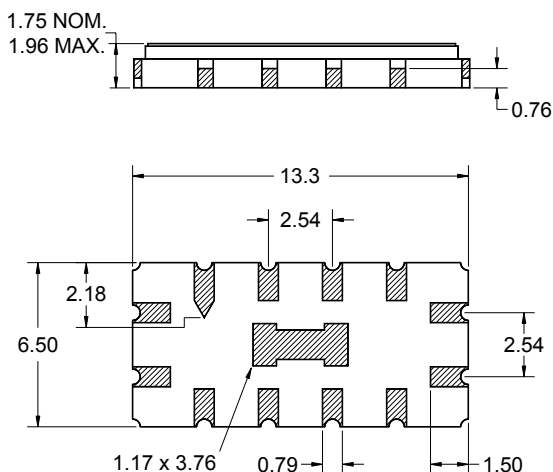
Features

- For fixed wireless applications
- Usable bandwidth of 2.6 MHz
- High attenuation
- Single-ended or balanced operation
- Ceramic Surface Mount Package (SMP)
- Hermetic
- RoHS compliant (2002/95/EC), Pb-free 



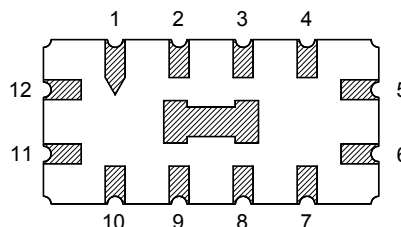
Package

Surface Mount 13.30 x 6.50 x 1.75 mm



Pin Configuration

Bottom View



Pin No.	Description
5	Output
6	Output return
11	Input
12	Input return
1,2,3,4	Case ground
7,8,9,10	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: ⁽²⁾ +25 °C

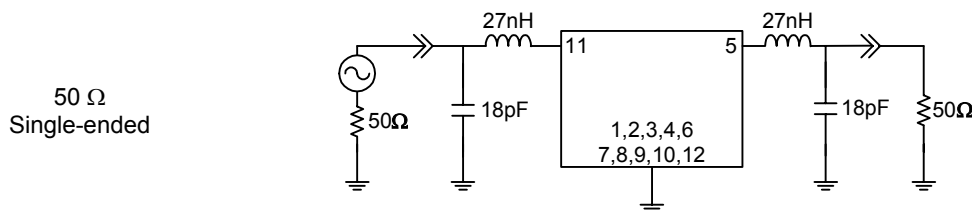
Parameter ⁽³⁾	Minimum	Typical	Maximum	Unit
Center Frequency @ 3dB	349.9	350	350.1	MHz
Insertion Loss at 350 MHz	-	13.7	15	dB
0.5 dB Bandwidth ⁽⁴⁾	1.7	1.97	-	MHz
3 dB Bandwidth ⁽⁴⁾	2.6	2.62	-	MHz
20 dB Bandwidth ⁽⁴⁾	-	3.82	4	MHz
45 dB Bandwidth ⁽⁴⁾	-	4.4	6	MHz
Group Delay Variation 348.9 - 351.1 MHz	-	30	70	nsec
Source Impedance ⁽⁵⁾	-	50	-	Ω
Load Impedance ⁽⁵⁾	-	50	-	Ω
Substrate Material	-	Quartz	-	-
Temperature Coefficient of Frequency	-	$\Delta F/F = -(T-T_0)/5.4]^2$	-	ppm/°C

Notes:

1. All specifications are based on the test circuit shown below
2. This specification is valid for room temperature only
3. Electrical margin has been built into the design to account for the variations due to manufacturing tolerances
4. Relative to insertion loss at 350MHz
5. This is the optimum impedance in order to achieve the performance shown

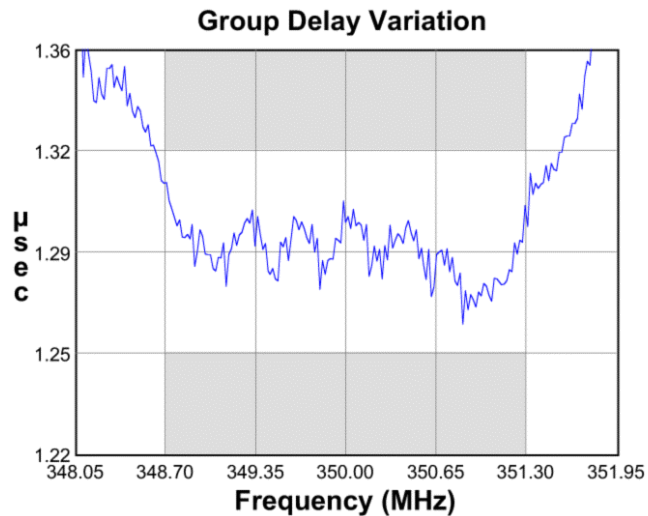
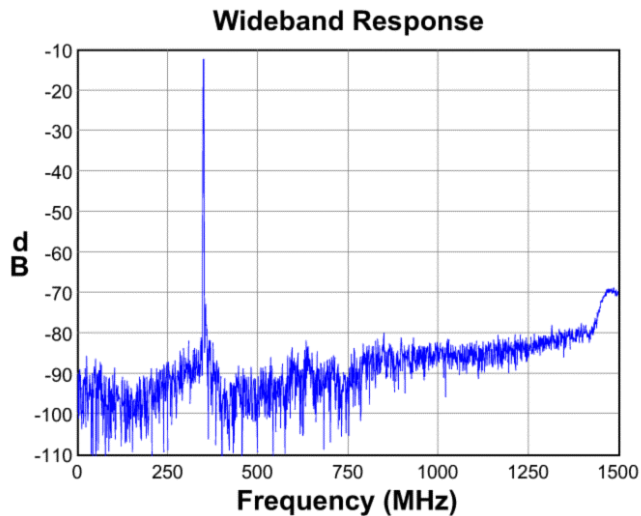
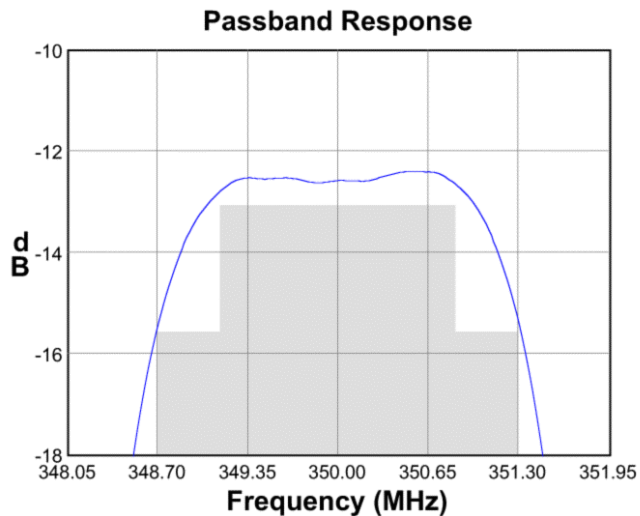
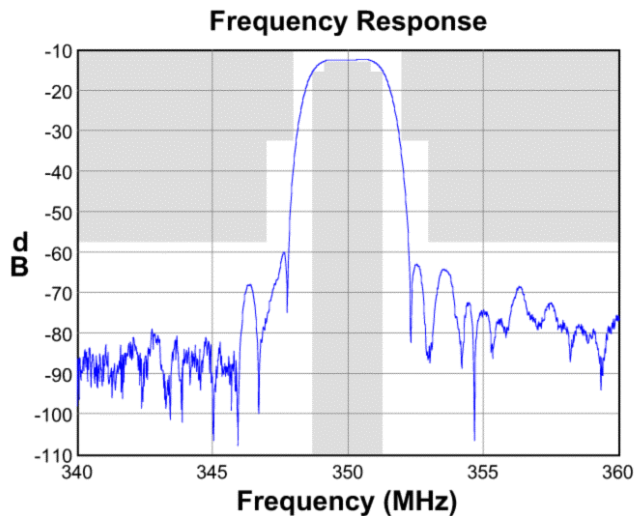
Test Circuit:

Actual matching values may vary due to PCB layout and parasitics

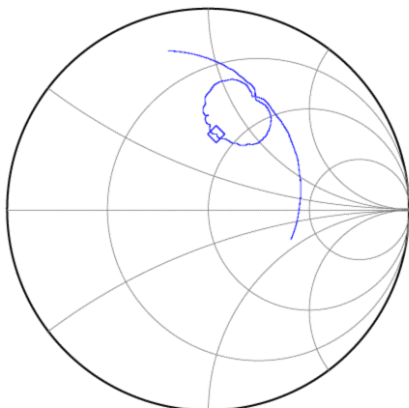


Data Sheet

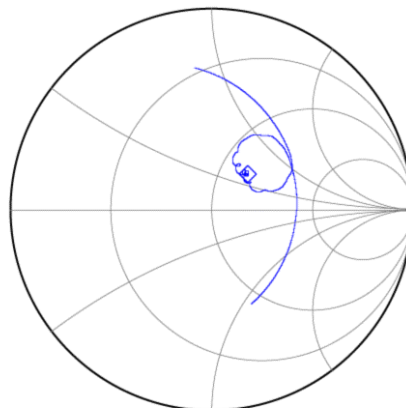
Typical Performance (at +25°C)



Input Smith Chart



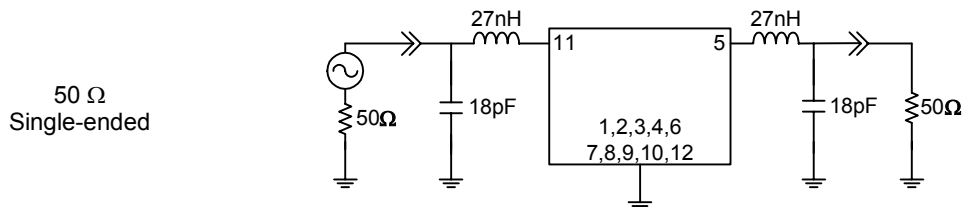
Output Smith Chart



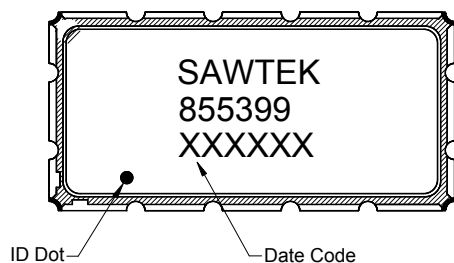
Data Sheet

Matching Schematics

Actual matching values may vary due to PCB layout and parasitics

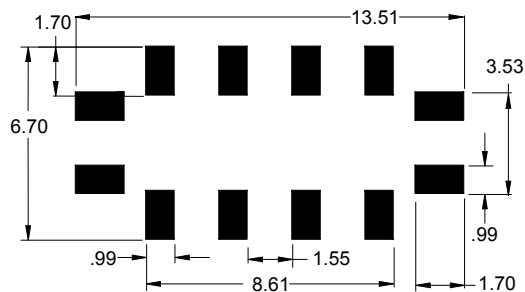


Marking



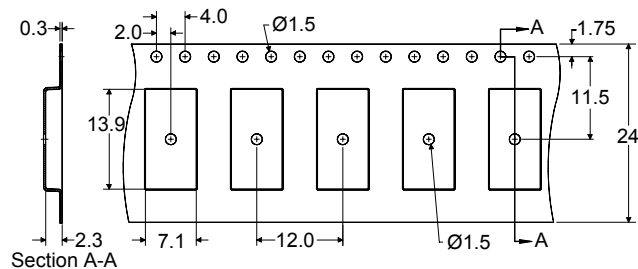
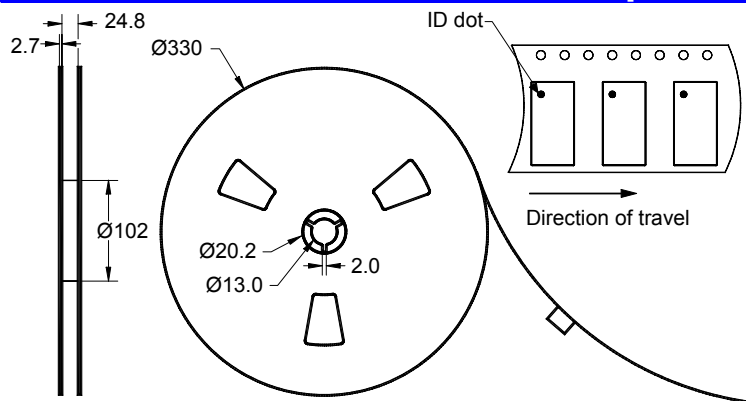
The date code consists of: day of the current year (Julian, 3 digits), last digit of the year (1 digit) and hour (2 digits)

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: 2000 units/reel

Data Sheet

Maximum Ratings

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating Temperature Range	T	-	+25	-	°C

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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