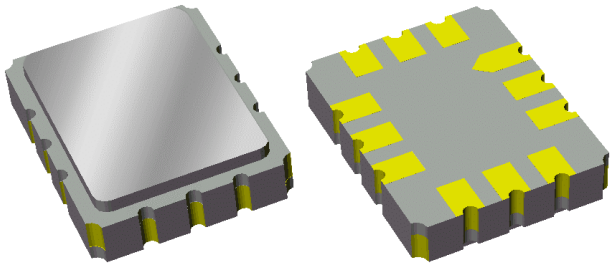
SAWTEK a TriQuint company

Data Sheet

Part Number 855377
350 MHz SAW Filter

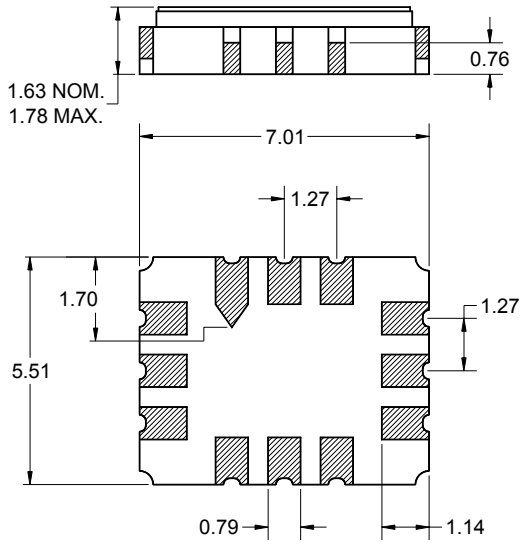
Features

- For wireless data applications
- Usable bandwidth of 1 MHz
- High attenuation
- Single-ended operation at 50Ω
- Ceramic Surface Mount Package (SMP)
- Small size



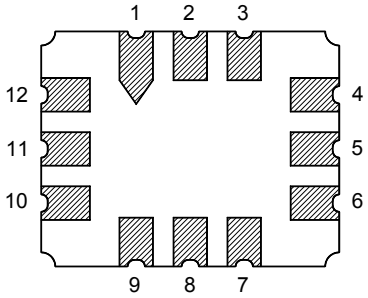
Package

Surface Mount 7.01 x 5.51 x 1.63 mm



Pin Configuration

Bottom View



Pin No.	Description
4	Output
6	Output return
10	Input
12	Input return
1,2,3,5	Case Ground
7,8,9,11	Case Ground

Dimensions shown are nominal in millimeters
All tolerances are ±0.15mm except overall length and width ±0.13mm

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] -10 to +60 °C

Parameter [3]	Minimum	Typical	Maximum	Unit
Center Frequency	-	350	-	MHz
Insertion Loss at 350 MHz	-	8.2	10	dB
1 dB Bandwidth [4]	1	1.57	-	MHz
3 dB Bandwidth [4]	1.8	2.4	-	MHz
30 dB Bandwidth [4]	-	4.76	5.1	MHz
40 dB Bandwidth [4]	-	5.3	5.6	MHz
45 dB Bandwidth [4]	-	5.6	15	MHz
Amplitude Variation 349.5 - 350.5 MHz	-	0.35	1	dB p-p
Group Delay Variation 349.5 - 350.5 MHz	-	72	200	nsec
Source Impedance [5]	-	50	-	Ω
Load Impedance [5]	-	50	-	Ω

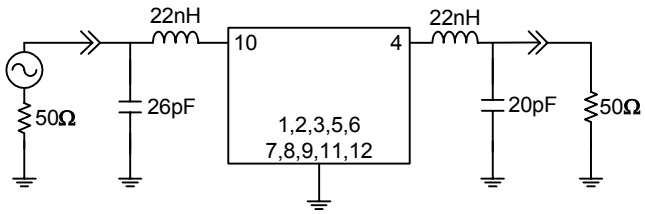
Notes:

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. All attenuation measurements are measured relative to insertion loss at 350 MHz
5. This is the optimum impedance in order to achieve the performance shown

Test Circuit:

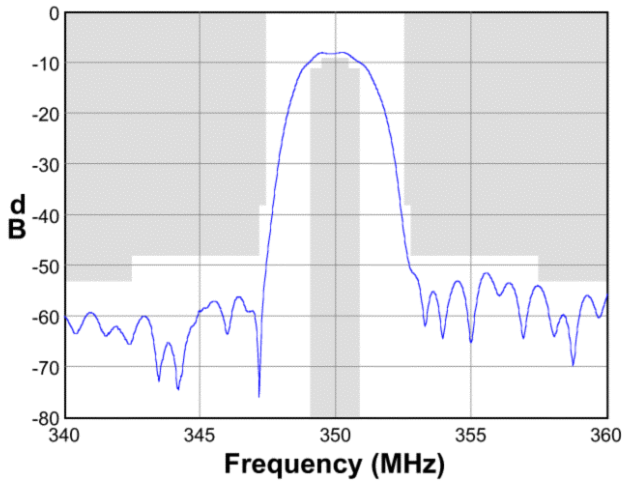
Actual matching values may vary due to PCB layout and parasitics

50 Ω
Single-ended

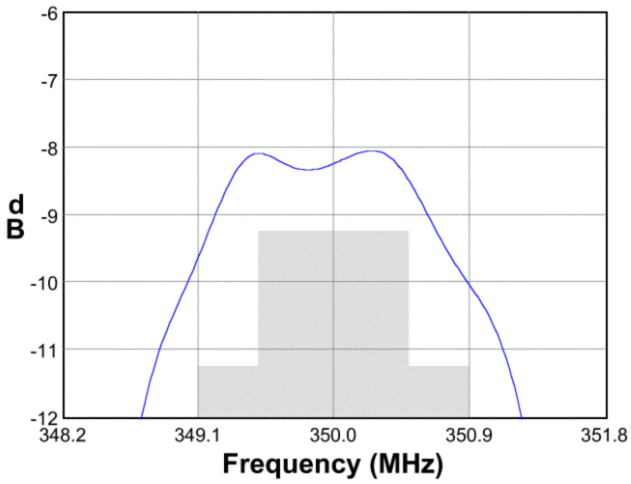


Typical Performance (at +25°C)

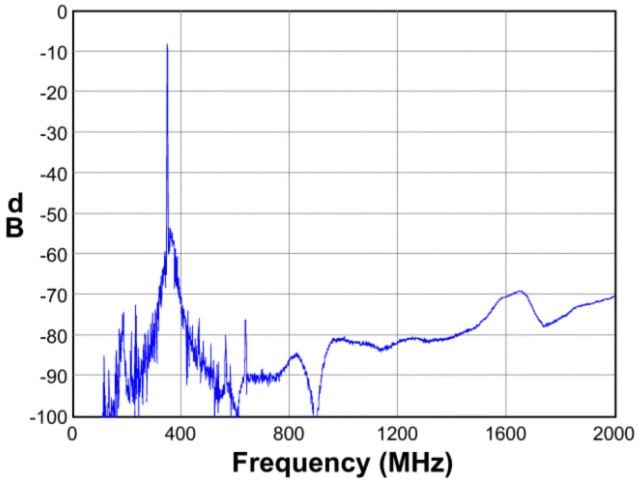
Frequency Response



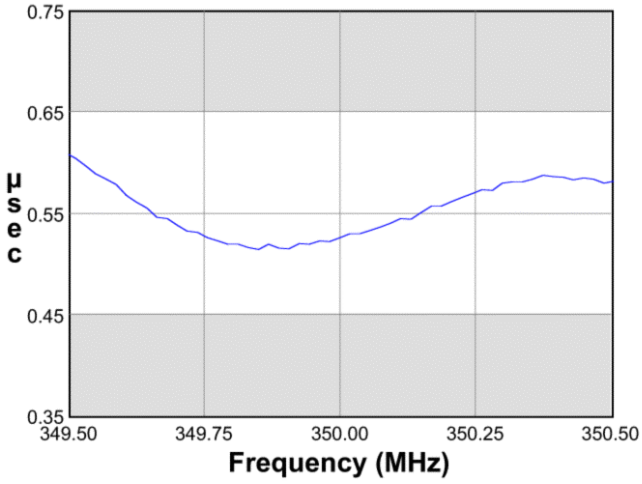
Passband Response



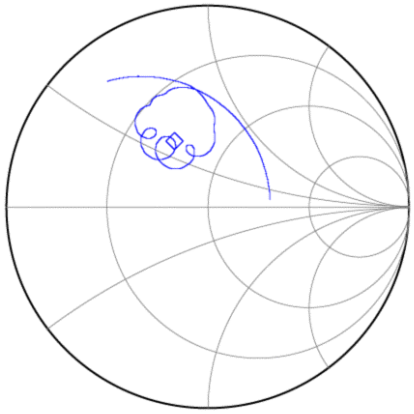
Wideband Response



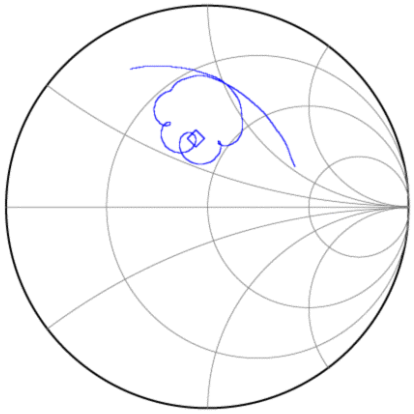
Group Delay



Input Smith Chart



Output Smith Chart



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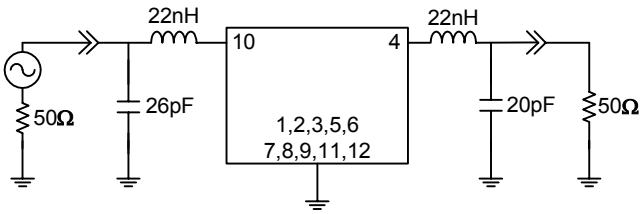
Matching Schematics

Actual matching values may vary due to PCB layout and parasitics

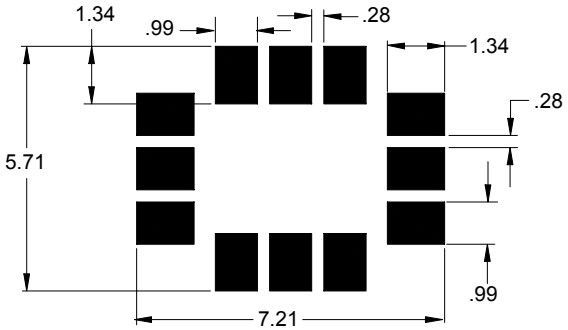
50 Ω
Single-ended



Marking

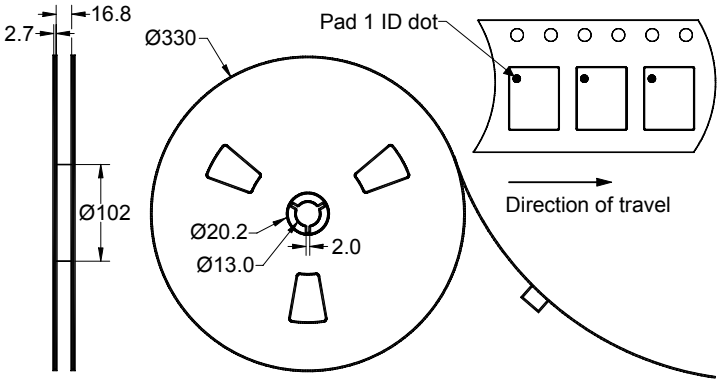
The date code consists of: day of the current year (Julian, 3 digits), last digit of the year (1 digit) and hour (2 digits)

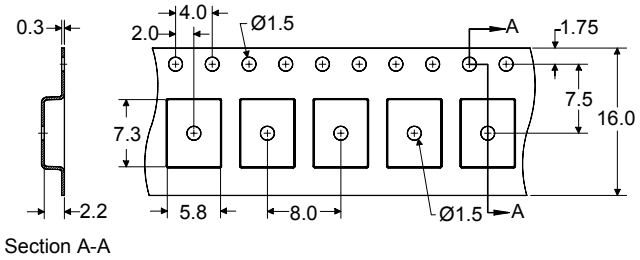
PCB Footprint



This footprint represents a recommendation only
Dimensions shown are nominal in millimeters

Tape and Reel





Dimensions shown are nominal in millimeters
Packaging quantity: 3000 units/reel

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Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Unit
Operating Temperature Range	T	-10	+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

Contact Information

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Or contact one of our worldwide network of sales offices, representatives or distributors