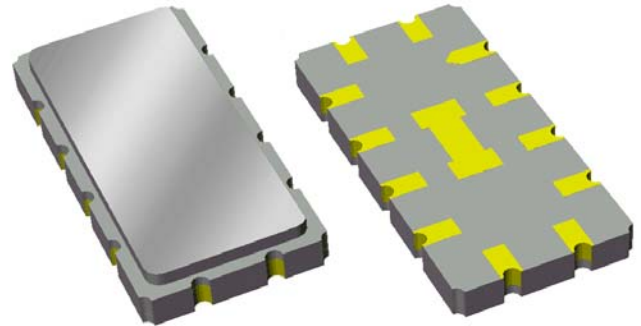


Data Sheet

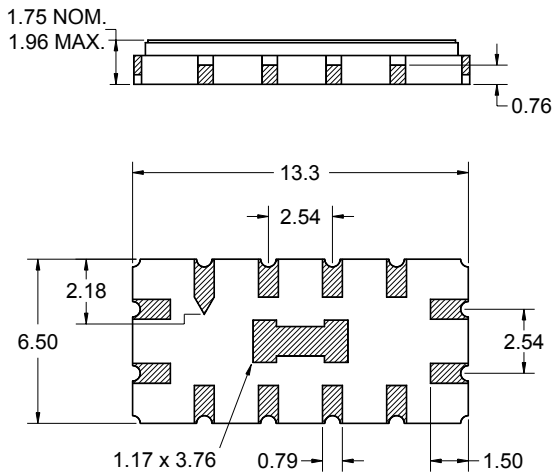
Features

- Usable bandwidth of 14 MHz
- Typical 3 dB bandwidth of 14.45 MHz
- Low loss
- High attenuation
- Single-ended operation, 50Ω
- Ceramic Surface Mount Package (SMP)
- Hermetic



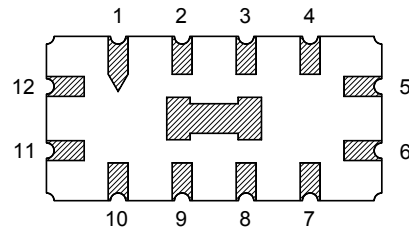
Package

Surface Mount 13.30 x 6.50 x 1.75 mm



Pin Configuration

Bottom View



| Pin No. | Description |
|----------|-------------|
| 5 | Output |
| 11 | Input |
| 6,12 | Ground |
| 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 - 1.0μm,
 over a 2 - 6μm Ni plating

Data Sheet
Electrical Specifications ⁽¹⁾

 Operating Temperature: ⁽²⁾ +25 °C

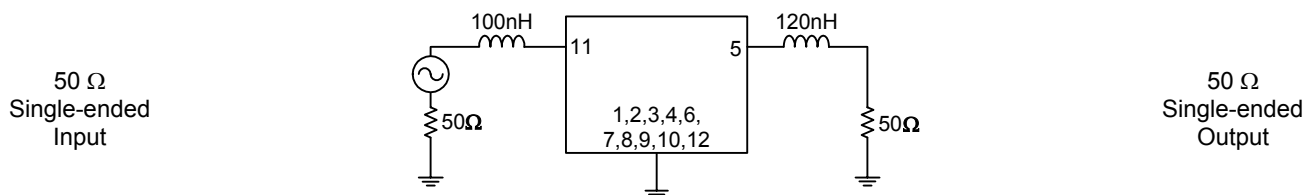
| Parameter | Minimum | Typical | Maximum | Unit |
|--|---------|---------|---------|--------|
| Center Frequency | 69.8 | 70 | 70.2 | MHz |
| Insertion Loss at F ₀ | - | 12.5 | 13 | dB |
| 1 dB Bandwidth | 13.35 | 13.55 | - | MHz |
| 3 dB Bandwidth | 14 | 14.45 | - | MHz |
| 40 dB Bandwidth | - | 19.5 | 20.25 | MHz |
| Passband Ripple 63.7 - 76.3 MHz | - | 0.7 | 1 | dB |
| Phase Linearity 63.7 - 76.3 MHz | - | 9 | 11.5 | deg |
| Group Delay Variation 63.7 - 76.3 MHz | - | 65 | 90 | nsec |
| Absolute Delay | - | 1.07 | - | μsec |
| Temperature Coefficient | - | -94 | - | ppm/°C |
| Source Impedance ⁽³⁾ | - | 50 | - | Ω |
| Load Impedance ⁽³⁾ | - | 50 | - | Ω |

Notes:

1. All specifications are based on the test circuit shown below
2. All specifications are tested at room temperature only
3. This is the optimum impedance in order to achieve the performance shown

Test Circuit:

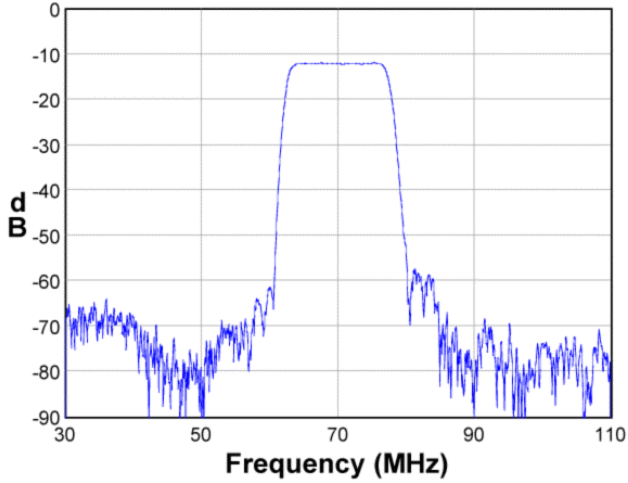
Actual matching values may vary due to PCB layout and parasitics



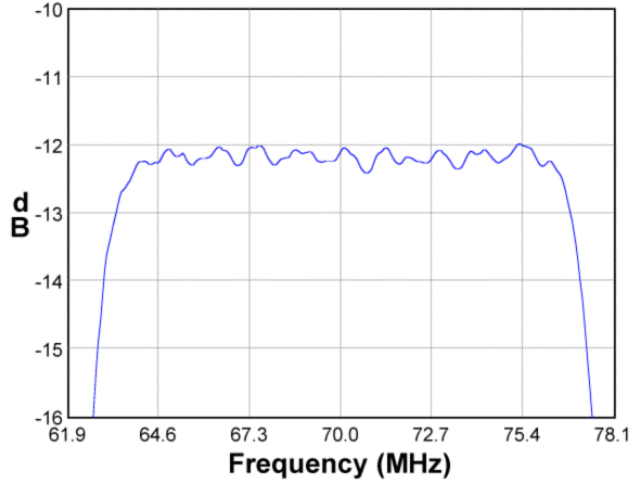
Data Sheet

Typical Performance (at +25°C)

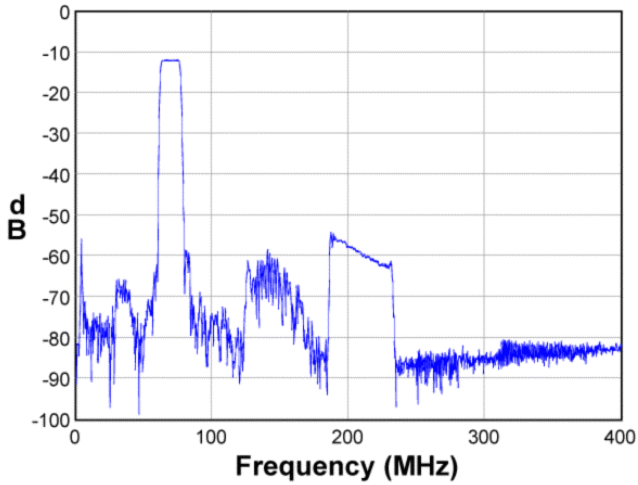
Frequency Response



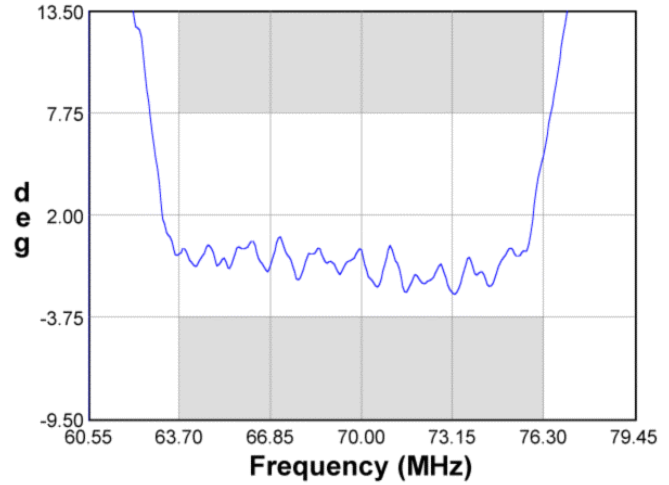
Passband Response



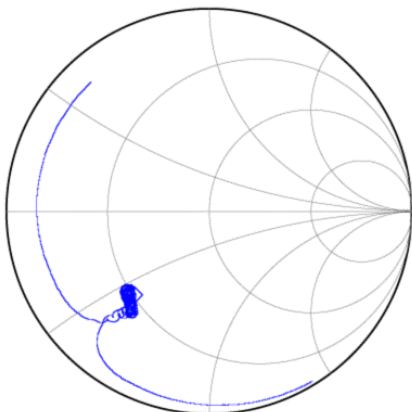
Wide Response



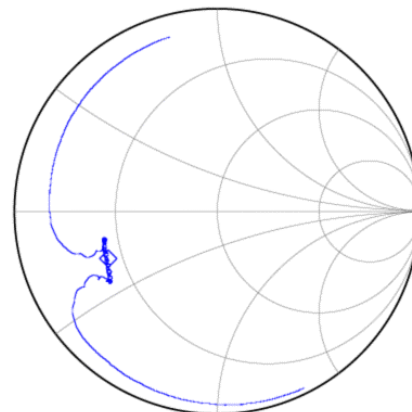
Phase Linearity



Input Smith Chart



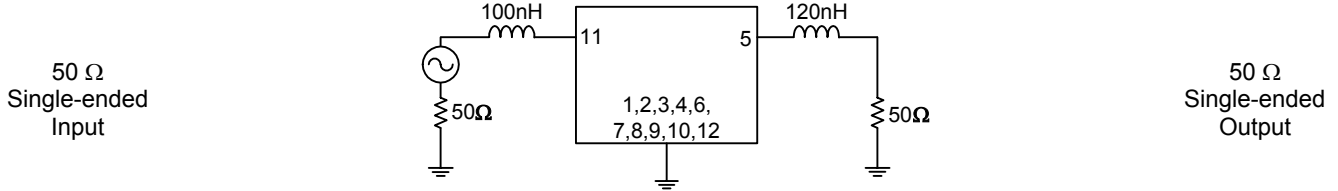
Output Smith Chart



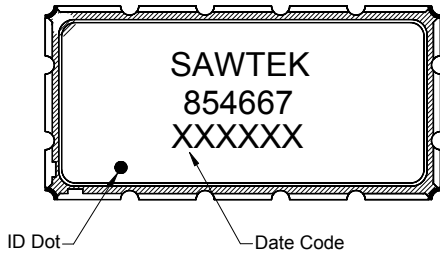
Data Sheet

Matching Schematics

Actual matching values may vary due to PCB layout and parasitics

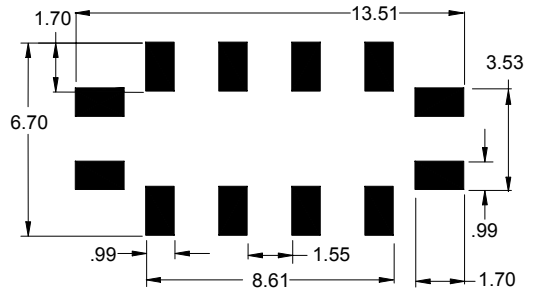


Marking



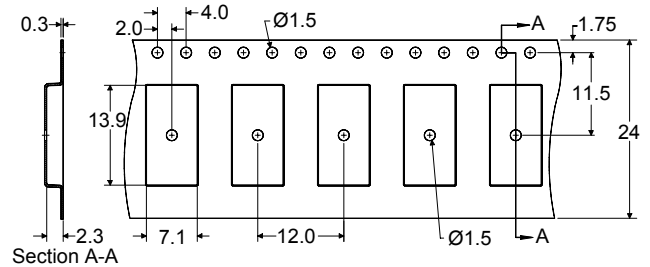
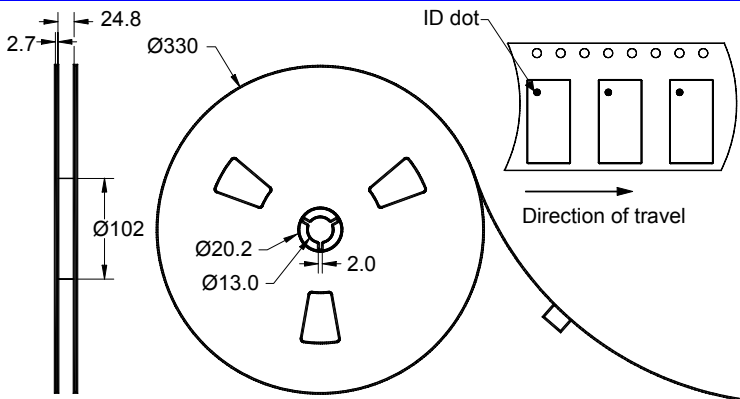
The date code consists of: day of the current year (Julian, 3 digits), last digit of the year (1 digit) and hour (2 digits)

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 | Maximum | Unit |
|---------------------------|------------------|---------|---------|------|
| Storage Temperature Range | T _{stg} | -40 | +85 | ° C |

Warnings

- Electrostatic Sensitive Device (ESD) 
- Avoid ultrasonic exposure

Material Content

- Does not contain lead (Pb) or other RoHS restricted materials

Links to Additional Technical Information

[PCB Layout Tips](#)

[Qualification Flowchart](#)

[Soldering Profile](#)

[S-Parameters](#)

[Other Technical Information](#)

Sawtek's liability is limited only to the Surface Acoustic Wave (SAW) component(s) described in this data sheet. Sawtek does not accept any liability for applications, processes, circuits or assemblies which are implemented using any Sawtek component described in this data sheet.

Contact Information



PO Box 609501
Orlando, FL 32860-9501
USA

Phone: +1 (407) 886-8860
Fax: +1 (407) 886-7061
Email: custservice@sawtek.com
Web: www.sawtek.com

Or contact one of our worldwide
Network of [sales offices](#),
[Representatives or distributors](#)