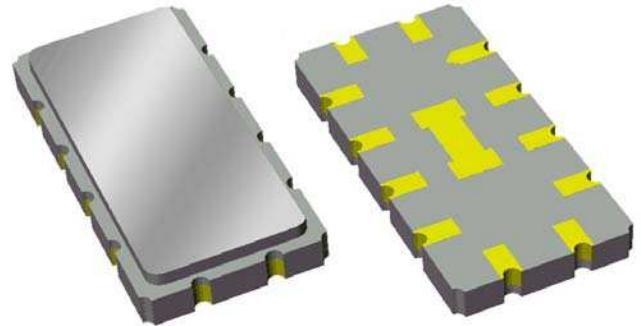


Data Sheet

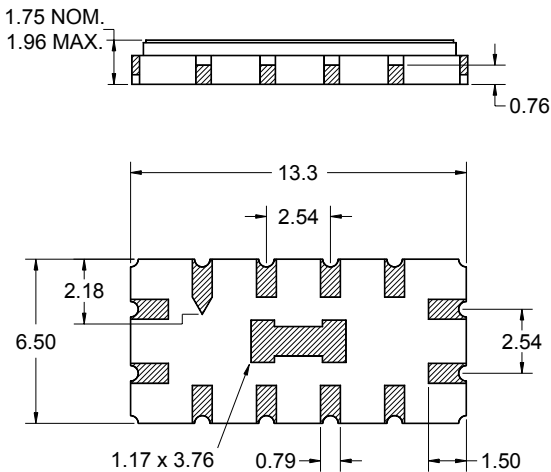
Features

- Usable bandwidth of 8.0 MHz
- Typical 3 dB bandwidth of 8.4 MHz
- Low loss
- High attenuation
- Single-ended operation, 50Ω
- Ceramic Surface Mount Package (SMP)
- Hermetic



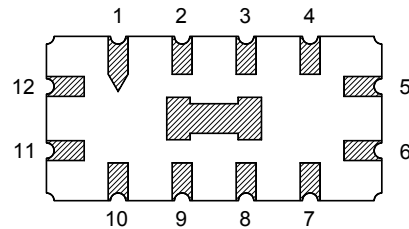
Package

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 - 1.0 μ m,
 over a 2 - 6 μ m Ni plating

Data Sheet

Electrical Specifications ⁽¹⁾

Operating Temperature: ⁽²⁾ +25 °C

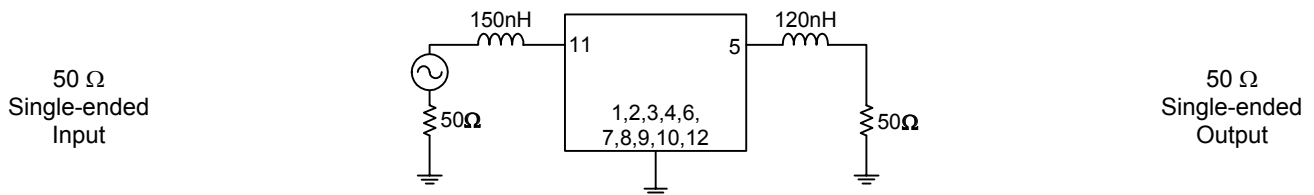
| Parameter | Minimum | Typical | Maximum | Unit |
|--|---------|---------|---------|--------|
| Center Frequency | 69.8 | 70 | 70.2 | MHz |
| Insertion Loss at F ₀ | - | 9 | 10 | dB |
| 1 dB Bandwidth | 7.35 | 7.6 | - | MHz |
| 3 dB Bandwidth | 8 | 8.4 | - | MHz |
| 40 dB Bandwidth | - | 13.25 | 14.25 | MHz |
| Passband Ripple 66.8 - 73.2 MHz | - | 0.9 | 1 | dB |
| Phase Linearity 66.8 - 73.2 MHz | - | 9.25 | 11 | deg |
| Group Delay Variation 66.8 - 73.2 MHz | - | 75 | 100 | nsec |
| Absolute Delay | - | 1.05 | - | 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

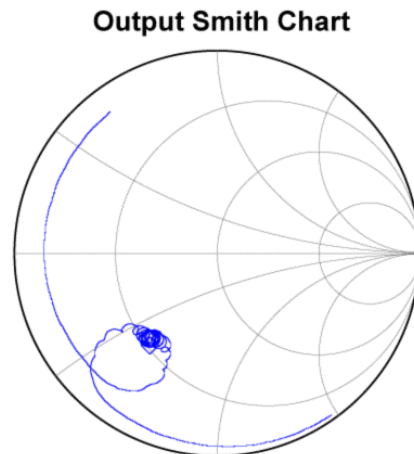
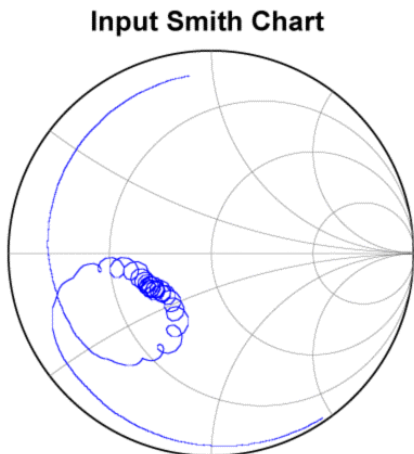
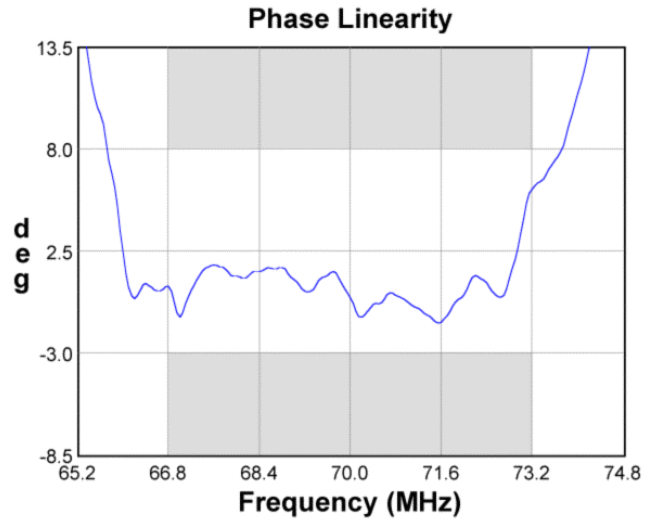
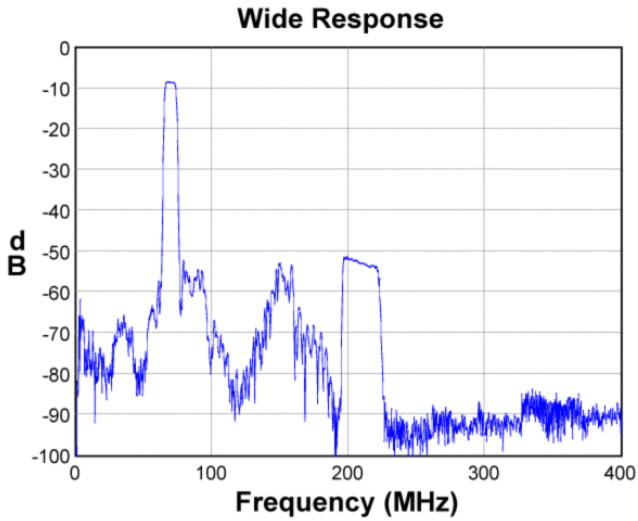
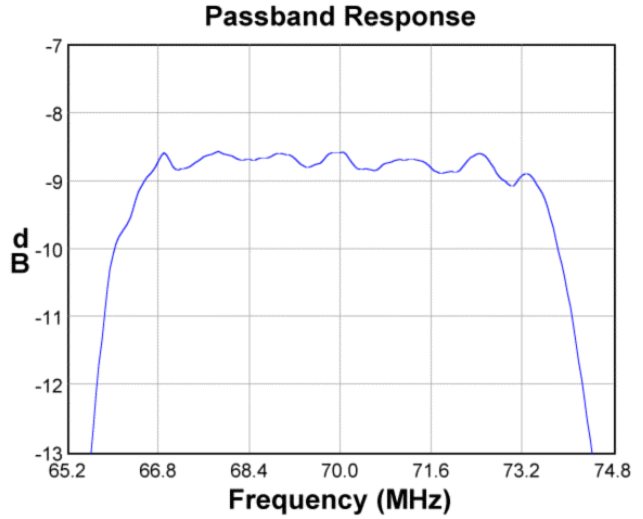
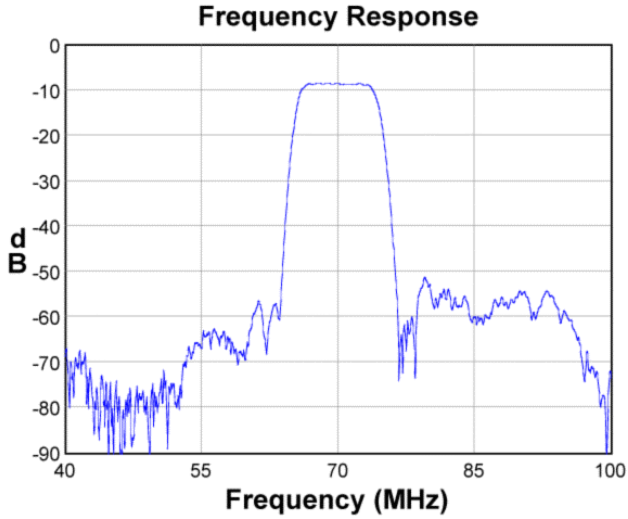
Test Circuit:

Actual matching values may vary due to PCB layout and parasitics



Data Sheet

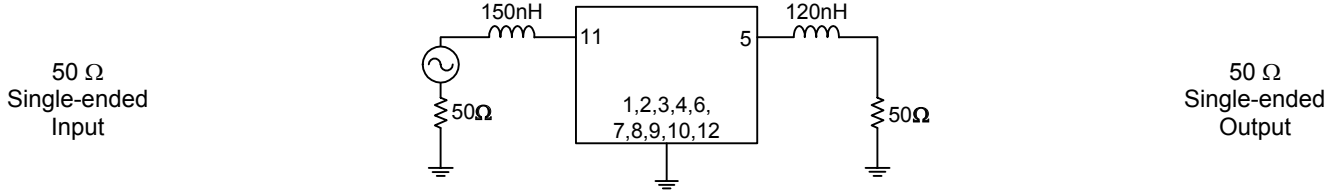
Typical Performance (at +25°C)



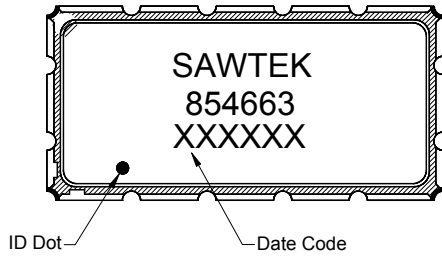
Data Sheet

Matching Schematics

Actual matching values may vary due to PCB layout and parasitics

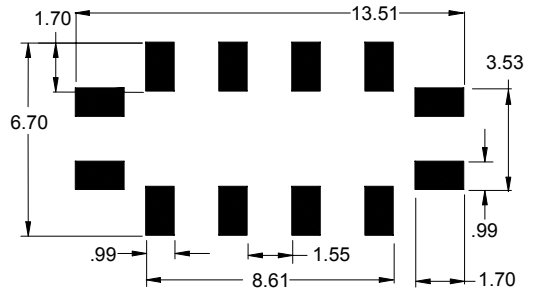


Marking



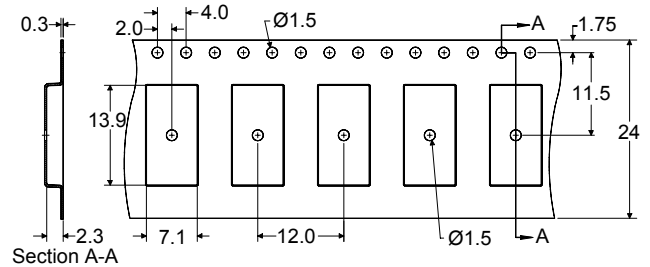
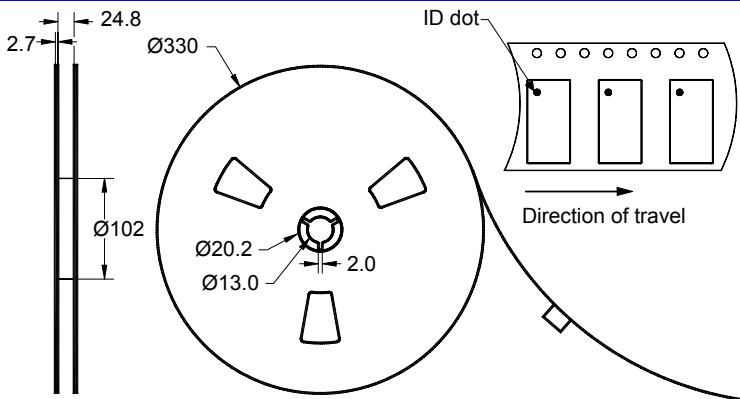
The date code consists of: day of the current year (Julian, 3 digits), last digit of the year (1 digit) and hour (2 digits)

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](#)

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