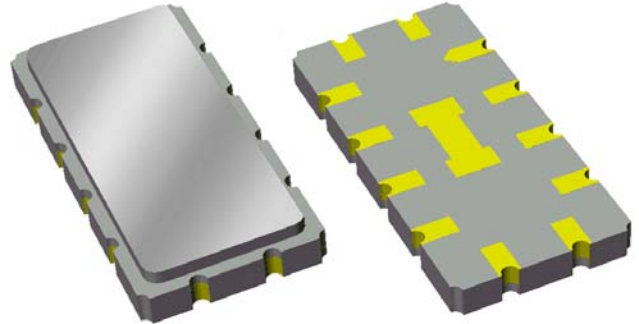


# Data Sheet

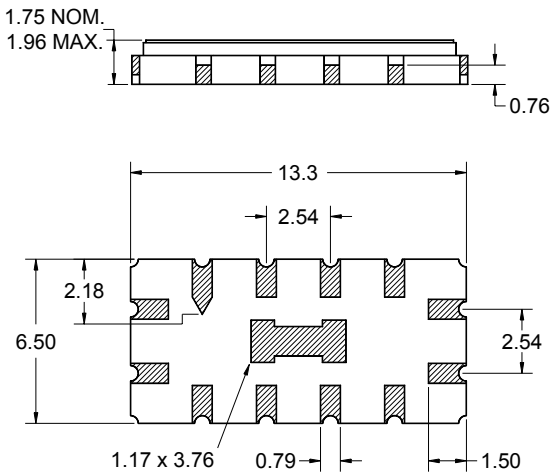
## Features

- Usable bandwidth of 4.0 MHz
- Typical 3 dB bandwidth of 4.45 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 ±0.15mm except overall  
 length and width ±0.10mm

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 <sup>(1)</sup>**

 Operating Temperature: <sup>(2)</sup> +25 °C

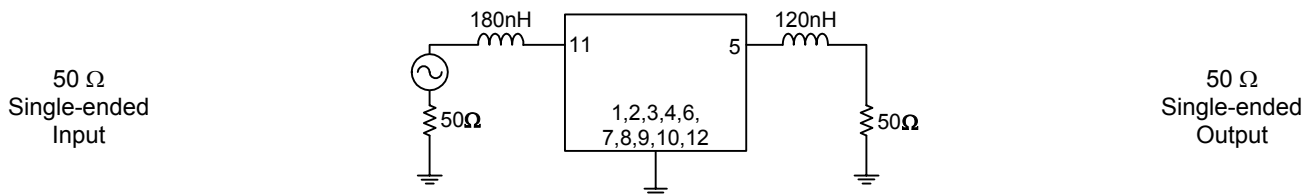
Parameter	Minimum	Typical	Maximum	Unit
<b>Center Frequency</b>	69.85	70	70.15	MHz
<b>Insertion Loss at F<sub>o</sub></b>	-	6.8	7.5	dB
<b>1 dB Bandwidth</b>	3.4	3.55	-	MHz
<b>3 dB Bandwidth</b>	4.0	4.45	-	MHz
<b>40 dB Bandwidth</b>	-	8.25	9.1	MHz
<b>Passband Ripple</b> 68.6 - 71.4 MHz	-	0.7	1	dB
<b>Phase Linearity</b> 68.6 - 71.4 MHz	-	4.75	6	deg
<b>Group Delay Variation</b> 68.6 - 71.4 MHz	-	90	150	nsec
<b>Absolute Delay</b>	-	0.95	-	μsec
<b>Temperature Coefficient</b>	-	-94	-	ppm/°C
<b>Source Impedance <sup>(3)</sup></b>	-	50	-	Ω
<b>Load Impedance <sup>(3)</sup></b>	-	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

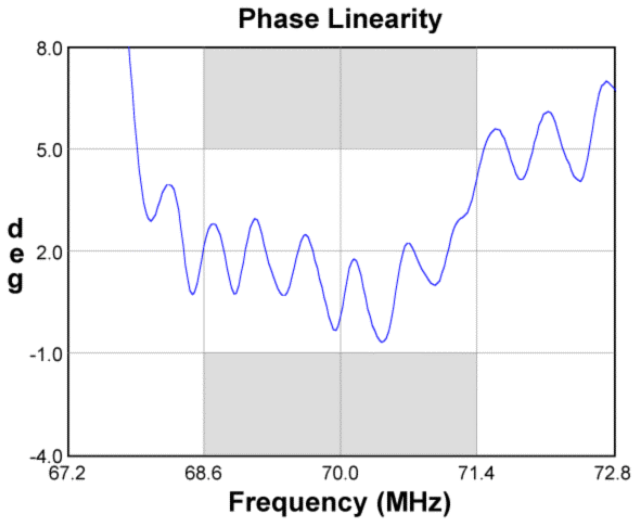
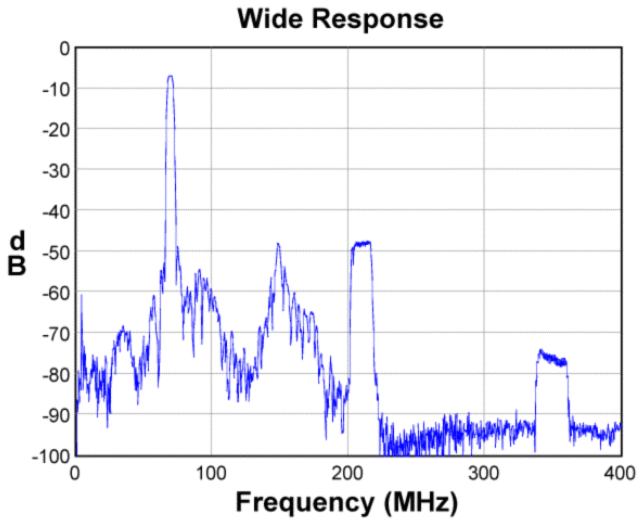
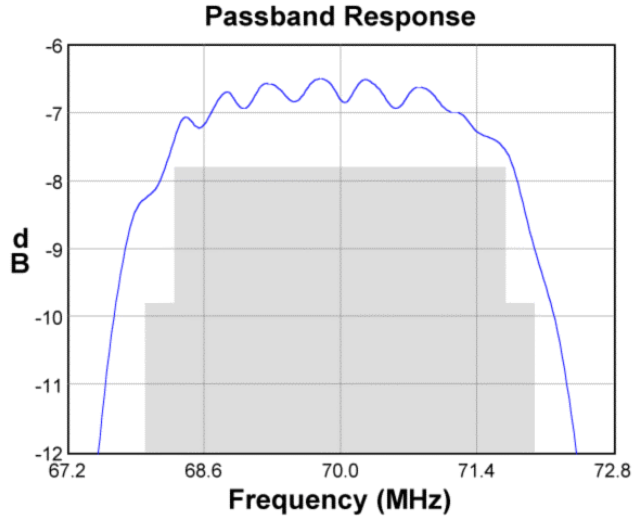
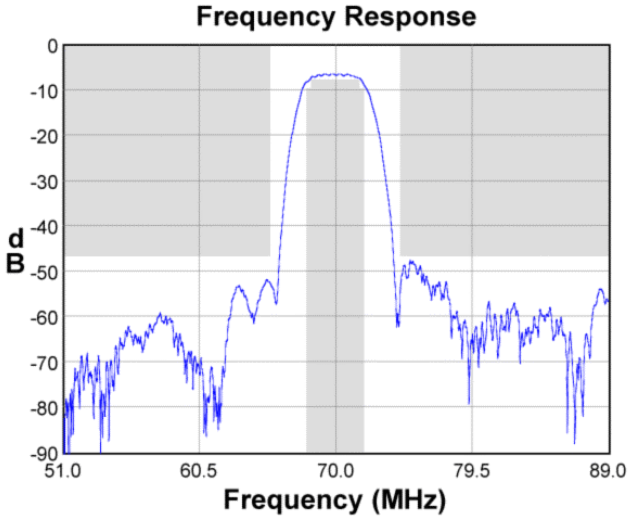
**Test Circuit:**

Actual matching values may vary due to PCB layout and parasitics

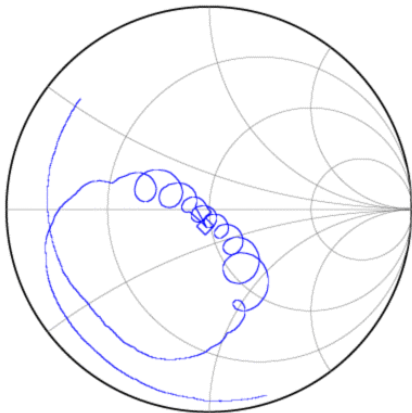


**Data Sheet**

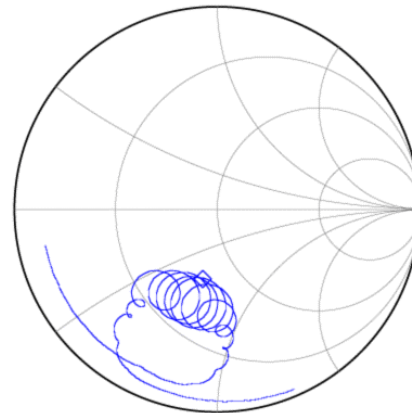
**Typical Performance (at +25°C)**



**Input Smith Chart**



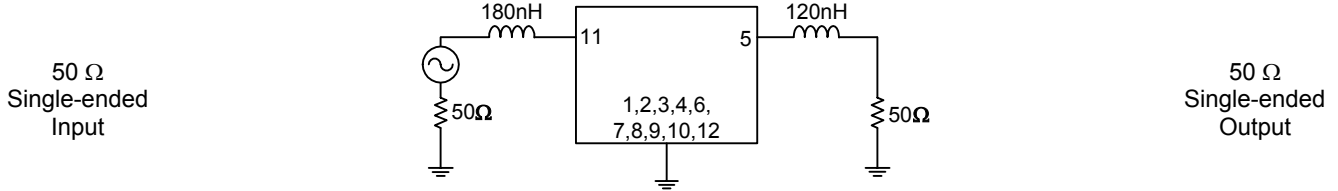
**Output Smith Chart**



**Data Sheet**

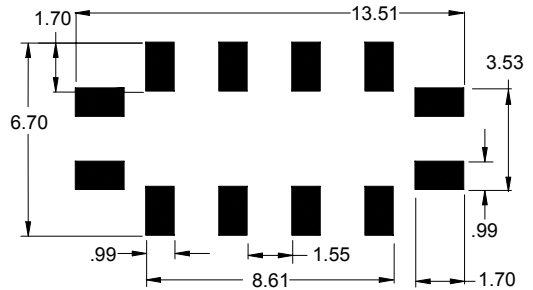
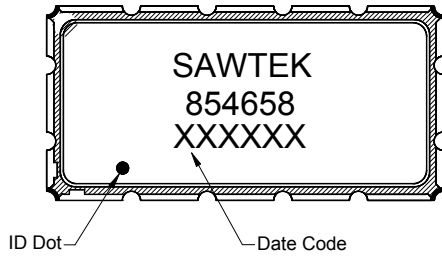
**Matching Schematics**

Actual matching values may vary due to PCB layout and parasitics



**Marking**

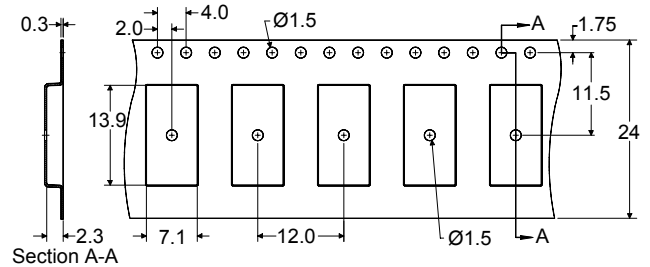
**PCB Footprint**



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

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 <sub>stg</sub>	-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](mailto:custservice@sawtek.com)  
Web: [www.sawtek.com](http://www.sawtek.com)

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

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Signal Conditioning](#) category:*

*Click to view products by [Qorvo](#) manufacturer:*

Other Similar products are found below :

[MAPDCC0001](#) [MAPDCC0004](#) [PD0409J5050S2HF](#) [880157](#) [HHS-109-PIN](#) [DC1417J5005AHF](#) [AFS14A30-2185.00-T3](#) [AFS14A35-1591.50-T3](#) [DS-323-PIN](#) [B39321R801H210](#) [1A0220-3](#) [JP510S](#) [LFB212G45SG8C341](#) [LFB322G45SN1A504](#) [LFL182G45TC3B746](#) [SF2159E](#) [30057](#) [FM-104-PIN](#) [CER0813B](#) [MAPDCC0005](#) [3A325](#) [40287](#) [41180](#) [ATB3225-75032NCT](#) [BD0810N50100AHF](#) [BD2425J50200AHF](#) [C5060J5003AHF](#) [JHS-115-PIN](#) [JP503AS](#) [DC0710J5005AHF](#) [DC2327J5005AHF](#) [DC3338J5005AHF](#) [43020](#) [LFB2H2G60BB1C106](#) [LFL15869MTC1B787](#) [X3C19F1-20S](#) [XC3500P-20S](#) [10013-20](#) [SF2194E](#) [CDBLB455KCAX39-B0](#) [TGL2208-SM, EVAL](#) [RF1353C](#) [1E1305-3](#) [1F1304-3S](#) [1G1304-30](#) [B0922J7575AHF](#) [2020-6622-20](#) [10017-3](#) [TP-103-PIN](#) [BD1222J50200AHF](#)