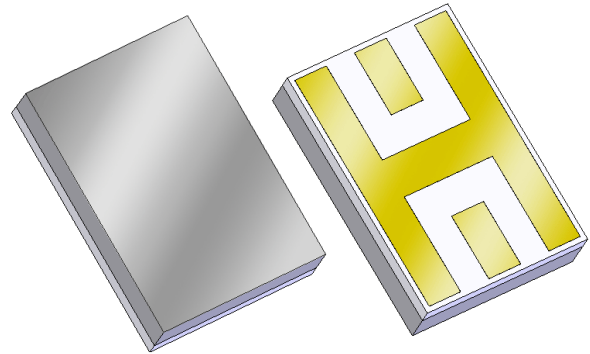


# 880157

## 2560 MHz BAW Filter

### Applications

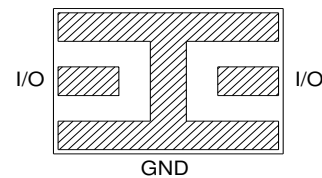
- S-Band
- For high-selectivity applications



### Product Features

- Usable bandwidth 30 MHz
- Low loss
- High selectivity
- Single-ended operation
- Ceramic chip-scale Package (CSP)
- Small Size
- Hermetic **RoHS** compliant, **Pb-free**

### Functional Block Diagram



Overall width, length, and thickness are the only critical dimensions. All other dimensions are for reference only.

Dimensions shown are nominal in millimeters  
All tolerances are  $\pm 0.13\text{mm}$  except overall length and width  $\pm 0.25\text{mm}$

Body: *Sapphire*  
Package: *Alumina*

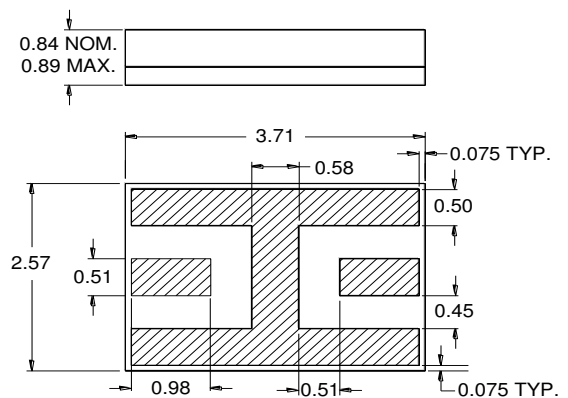
Terminations: *Au* plating 0.5 - 2.5 $\mu\text{m}$ , over a 2.0 - 6.0  $\mu\text{m}$  *Ni* plating

### Pin Configuration

Pin #	SE-Balanced	Description
I/O		Input/Output
GND		Ground

### Ordering Information

Part No.	Description
880157	packaged part
880157 Eval Board	evaluation board



## Specifications

### Electrical Specifications <sup>(1)</sup>

Specified Temperature Range: <sup>(2)</sup> -40 to +85 °C

Parameter <sup>(3)</sup>	Conditions	Min	Typical <sup>(4)</sup>	Max	Units
Center Frequency		-	2560	-	MHz
Maximum Insertion Loss	@ 2560 MHz	-	3.8	4.5	dB
3dB Bandwidth	Reference loss at 2560 MHz	30	38	-	MHz
40dB Lower Frequency Edge		2505	2525	-	MHz
40dB Upper Frequency Edge		-	2595	2610	MHz
VSWR	@ 2560 MHz	-	1.5	2.0	-
Source Impedance (single-ended) <sup>(5)</sup>		-	50	-	$\Omega$
Load Impedance (single-ended) <sup>(5)</sup>		-	50	-	$\Omega$

Notes:

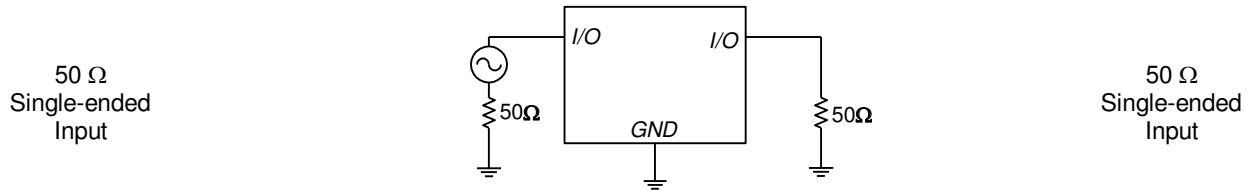
- All specifications are based on the TriQuint schematic for the main reference design shown on page 3
- In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over temperature
- Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
- Typical values are based on average measurements at room temperature
- This is the optimum impedance in order to achieve the performance shown

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2560 MHz BAW Filter

## Reference Design

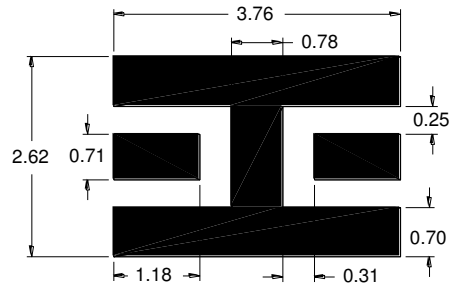
### Schematic



### PC Board

Refer to [PCB Layout](#) for more information.

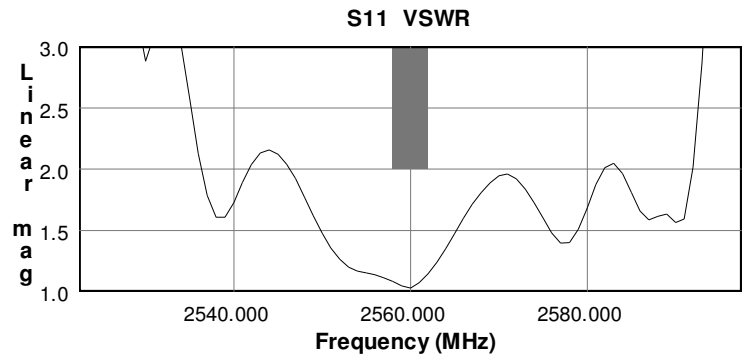
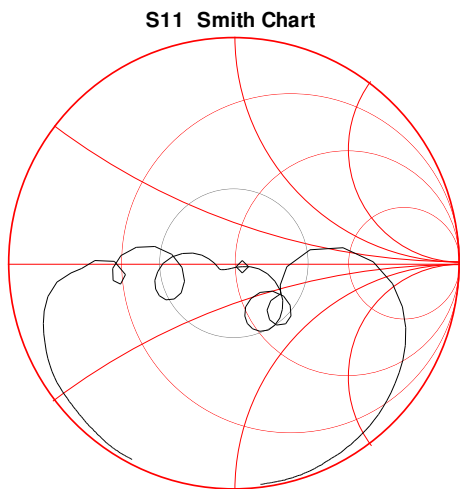
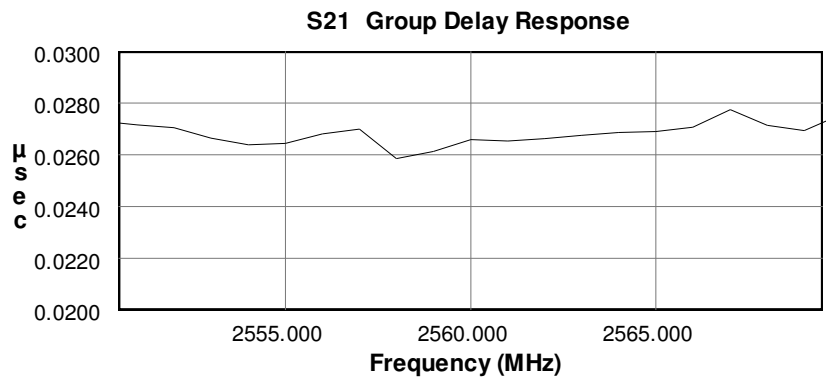
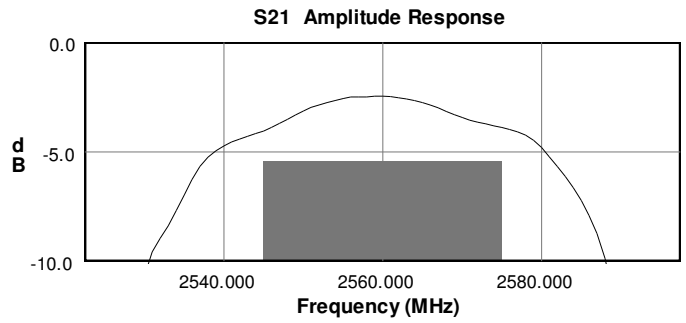
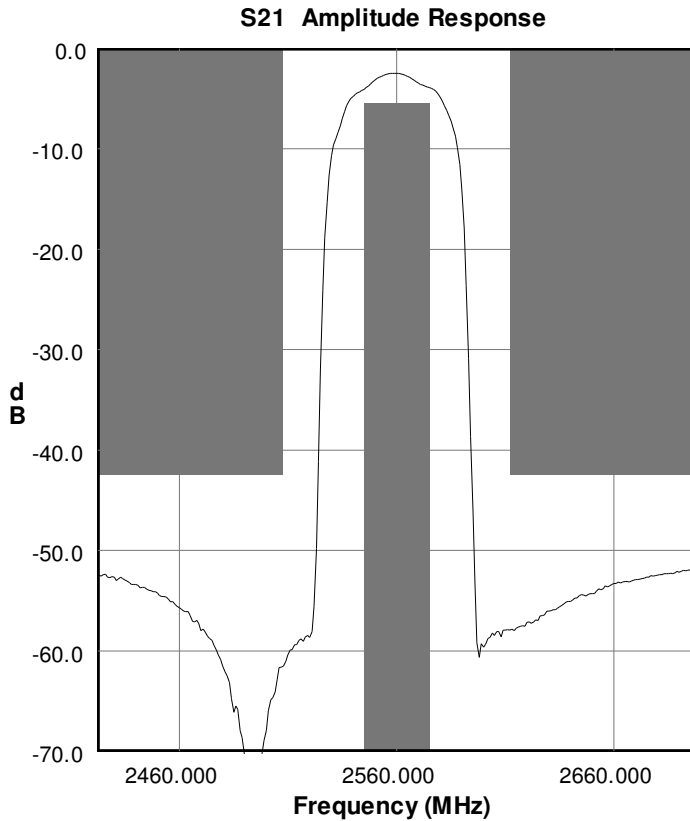
### Mounting Configuration



Notes:

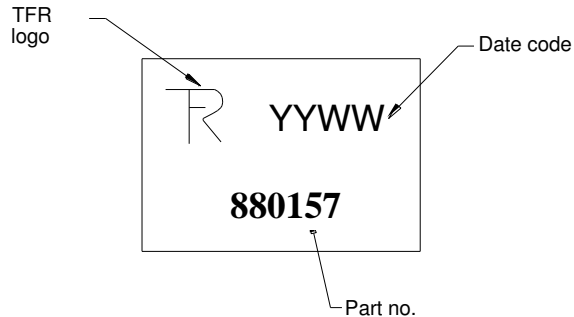
1. All dimensions are in millimeters.
2. This footprint represents a recommendation only.

### Typical Performance (at room temperature)



### Mechanical Information

#### Marking



The date code consists of: YY = last digit of year,  
WW = 2 digit week

### Tape and Reel Information

Tape and Reel available upon request  
EIA-481

Tinning available per J-STD-001

#### Absolute Maximum Ratings

Parameter	Rating
Operating Temperature	-40 to +85 °C
Storage Temperature	-55 to +100 °C
Maximum Input Power	+23 dBm

Operation of this device outside the parameter ranges given above may cause permanent damage.

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## 2560 MHz BAW Filter

### Product Compliance Information

#### ESD Information



#### Caution! ESD-Sensitive Device

Value: Passes  $\geq 4000$  V min.  
Test: Human Body Model (HBM)  
Standard: JEDEC Standard JESD22-A114

Value: Passes  $\geq 200$  V min.  
Test: Machine Model (MM)  
Standard: JEDEC Standard JESD22-A115

Refer to [ESD Sensitivity](#) for data

#### Solderability

Compatible with the latest version of J-STD-020, lead free solder, 260°C

Refer to [Soldering Profile](#) for recommended guidelines.

This part is compliant with EU 2002/95/EC RoHS directive (Restrictions on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment).

This product also has the following attributes:

- Halogen Free (Chlorine, Bromine)
- Antimony Free
- TBBP-A (C<sub>15</sub>H<sub>12</sub>Br<sub>4</sub>O<sub>2</sub>) Free
- PFOS Free
- SVHC Free

### Contact Information

For the latest specifications, additional product information, worldwide sales and distribution locations, and information about TriQuint:

Web: [www.triquint.com](http://www.triquint.com)  
Email: [info-sales@tqs.com](mailto:info-sales@tqs.com)

Tel: +1.407.886.8860  
Fax: +1.407.886.7061

For technical questions and application information:

Email: [info-defense@tqs.com](mailto:info-defense@tqs.com)

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