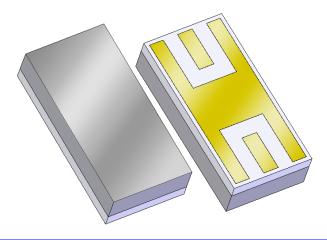


## **Data Sheet**

# Part Number 880272 1227 MHz BAW Filter

#### **Features**

- For GPS applications
- Usable bandwidth of 30 MHz
- Single-ended operation
- Ceramic Surface Mount Package
- Hermetic

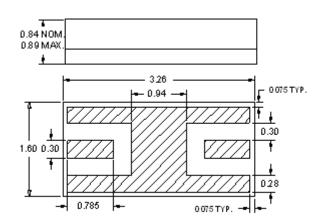


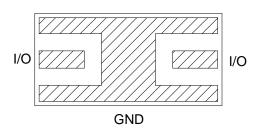
#### **Package**

Surface Mount 3.26 x 1.60 x 0.84 mm

## **Pin Configuration**

**Bottom View** 





Pin No.	Description
I/O	Input/Output
GND	Ground

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

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

Body: Sapphire
Lid: Alumina

Terminations: Au plating 0.5 - 2.5 pm

Terminations: *Au* plating 0.5 - 2.5μm, over a 2.0 – 6.0 μm *Ni* plating



# **Data Sheet**

# Part Number 880272 1227 MHz BAW Filter

# Electrical Specifications (1)

Operating Temperature Range: (2) -40 to +85 °C

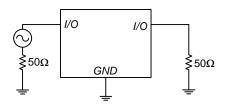
Parameter (3)	Minimum	Typical	Maximum	Unit
10dB Center Frequency	1222	1227	1232	MHz
Insertion Loss at Fo	-	2.25	3.75	dB
3 dB Bandwidth (4)	30	35	-	MHz
40 dB Bandwidth (4)	-	100	110	MHz
Passband Ripple (4)				
1212 - 1242 MHz	-	1.2	2	dB
Input/Output VSWR at Fo	-	1.5	2:1	_
Source Impedance	-	50	-	Ω
Load Impedance	-	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. Referenced to the insertion loss at center frequency
- 5. Measured as maximum peak to adjacent valley amplitude variation over frequency range.

#### **Test Circuit:**

50 Ω Single-ended Input

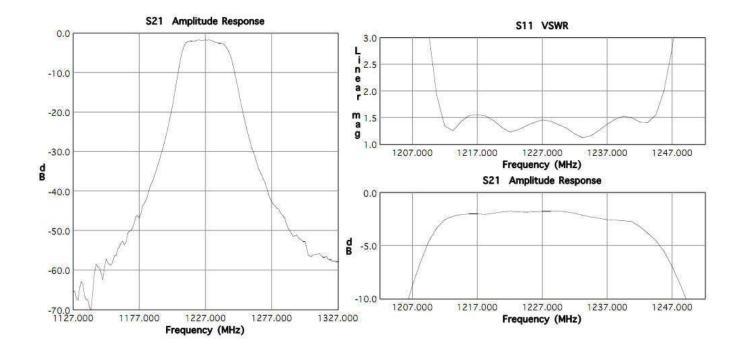


 $\begin{array}{c} 50~\Omega\\ \text{Single-ended}\\ \text{Output} \end{array}$ 



# Part Number 880272 1227 MHz BAW Filter

# Typical Performance (at +25°C)



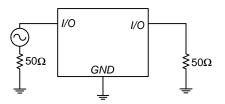


# Part Number 880272 1227 MHz BAW Filter

## **Data Sheet**

# **Matching Schematics**

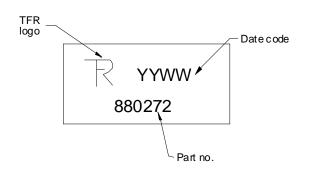
 $\begin{array}{c} 50~\Omega\\ \text{Single-ended}\\ \text{Input} \end{array}$ 

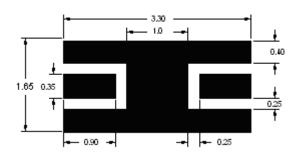


 $\begin{array}{c} 50~\Omega\\ \text{Single-ended}\\ \text{Output} \end{array}$ 

# **Marking**

### **PCB Footprint**





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

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

## **Tape and Reel**

# **Available on Request**



### **Data Sheet**

# Part Number 880272 1227 MHz BAW Filter

Maximum Ratings						
Parameter	Symbol	Minimum	Maximum	Unit		
Operating Temperature Range	Т	-40	+85	°C		
Storage Temperature Range	T <sub>stg</sub>	-55	+100	°C		

#### **Warnings**

Electrostatic Sensitive Device (ESD)



Avoid ultrasonic exposure

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

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