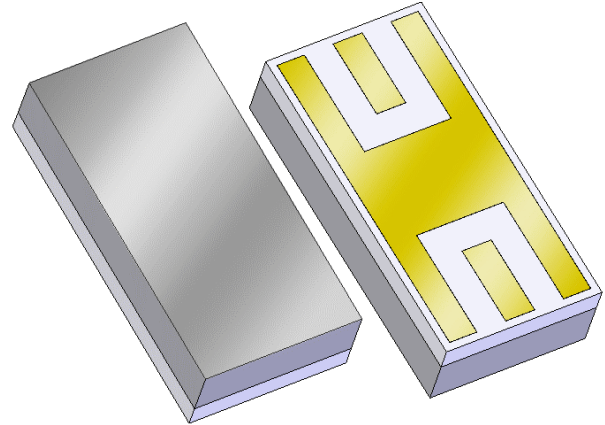


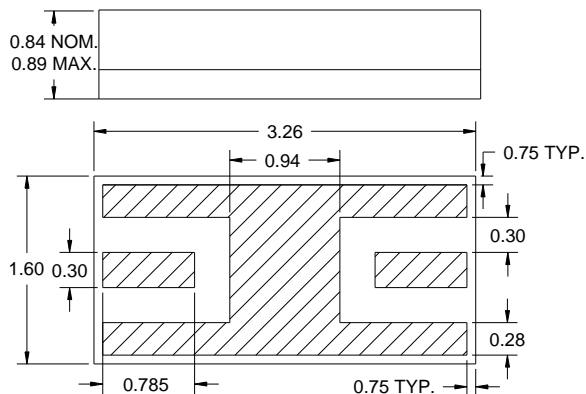
## Features

- For GPS L5 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



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.

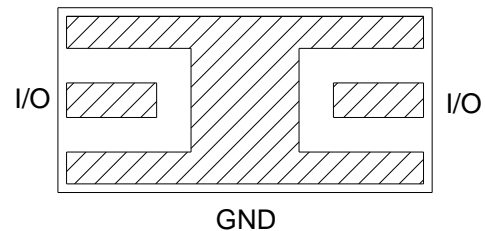
Body: *Sapphire*

Lid: *Alumina*

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

## Pin Configuration

Bottom View



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

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

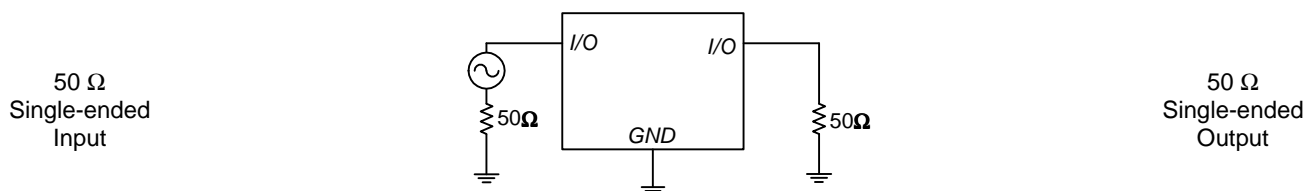
Operating Temperature Range: <sup>(2)</sup> -40 to +85 °C

Parameter <sup>(3)</sup>	Minimum	Typical	Maximum	Unit
10dB Center Frequency	1171	1176	1181	MHz
Insertion Loss at Fo	-	2.75	4.0	dB
3 dB Bandwidth <sup>(4)</sup>	30	40	-	MHz
40 dB Bandwidth <sup>(4)</sup>	-	130	160	MHz
Amplitude Variation <sup>(4)</sup> 1166 - 1186 MHz	-	1	2	dB
Input/Output VSWR at Fo	-	1.5	2.25:1	-
Source Impedance	-	50	-	Ω
Load Impedance	-	50	-	Ω

**Notes:**

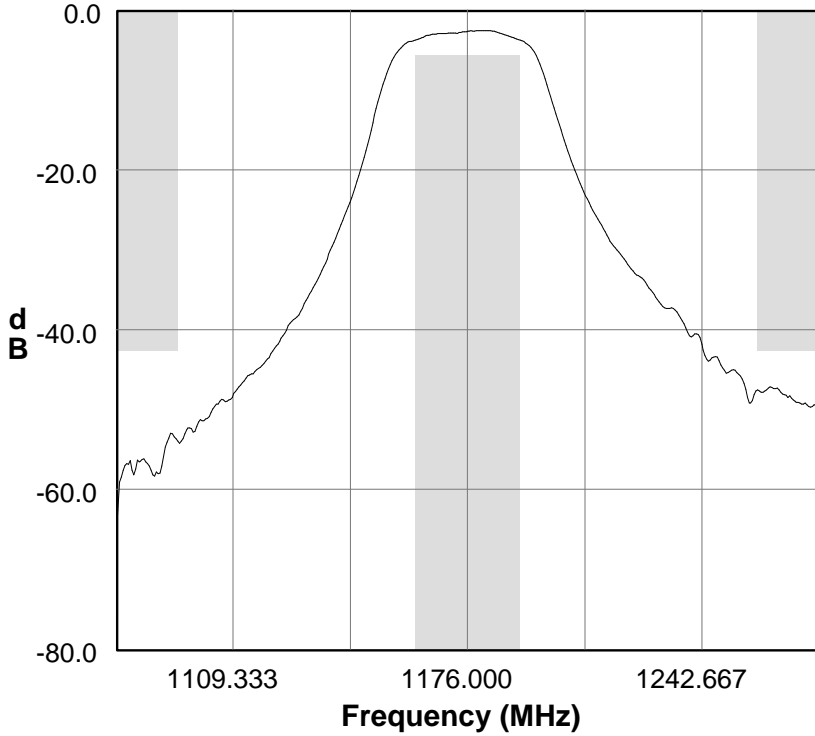
1. All specifications are based on the test circuit shown below
2. In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over temperature
3. Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances
4. Referenced to the insertion loss at center frequency

**Test Circuit:**

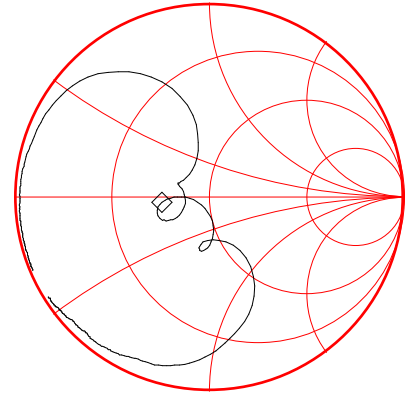


**Typical Performance (at +25°C)**

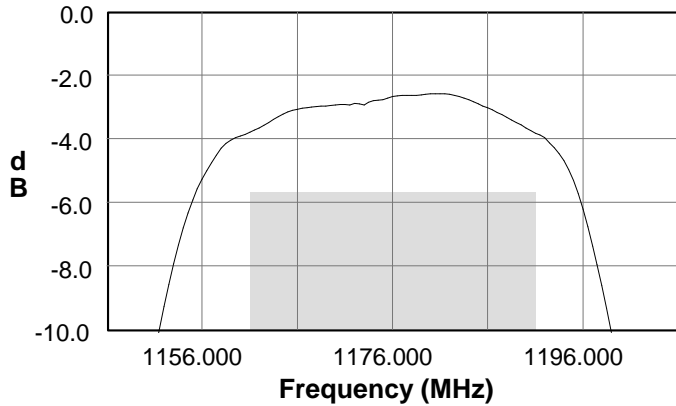
**S21 Amplitude Response**



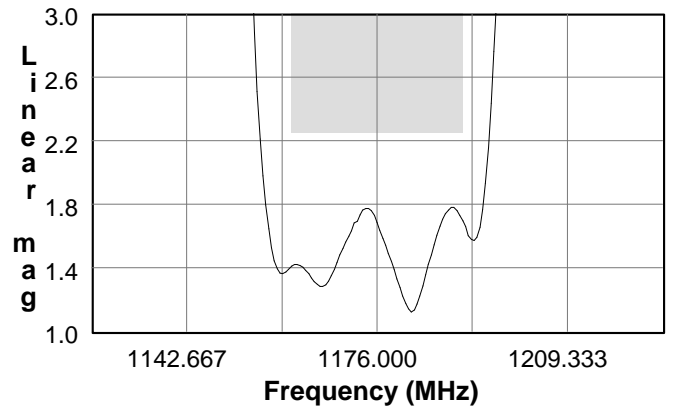
**S11 Smith Chart**



**S21 Amplitude Response**

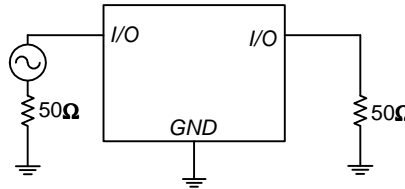


**S11 VSWR**



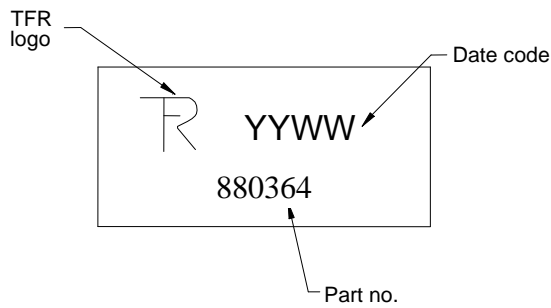
**Matching Schematics**

50  $\Omega$   
Single-ended  
Input



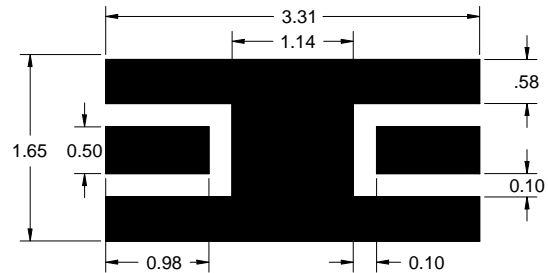
50  $\Omega$   
Single-ended  
Output

**Marking**



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

**PCB Footprint**



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

**Tape and Reel**

Tape and Reel available upon request  
EIA-481

Tinning available per J-STD-001

ROHS compliant (no tinning)  
DFARS compliant

**Maximum Ratings**

Parameter	Symbol	Minimum	Maximum	Unit
Operating Temperature Range	T	-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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[Representatives or distributors](#)