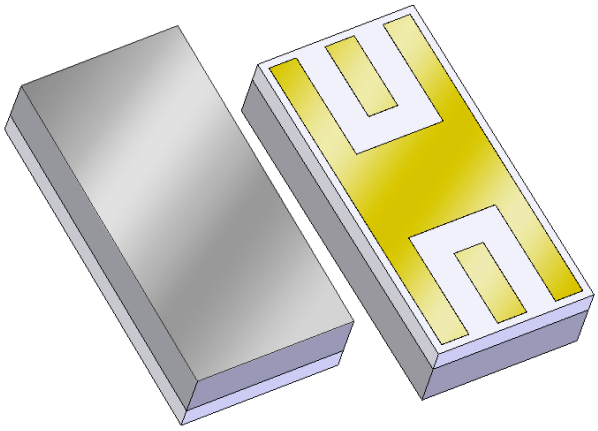
TriQuint SEMICONDUCTOR

Data Sheet

Part Number 880365
1380 MHz BAW Filter

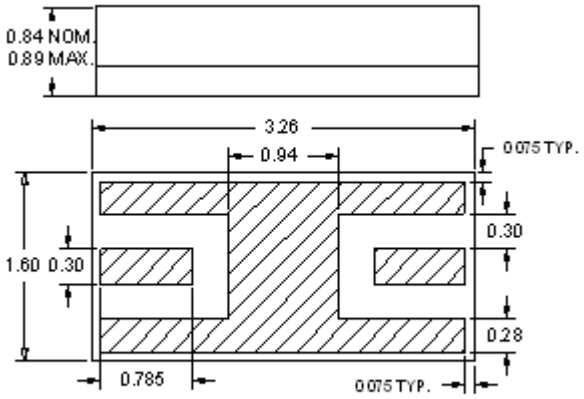
Features

- For GPS L3/4 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

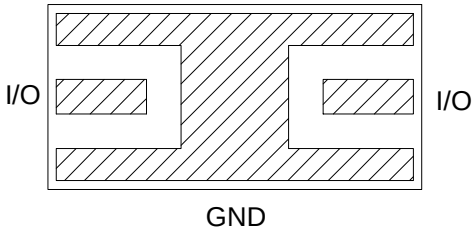


Dimensions shown are nominal in millimeters
All tolerances are ±0.13mm except overall length and width ±0.25mm

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 - 2.5μm, over a 2.0 – 6.0 μm *Ni* plating

Pin Configuration

Bottom View



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

Electrical Specifications [1]

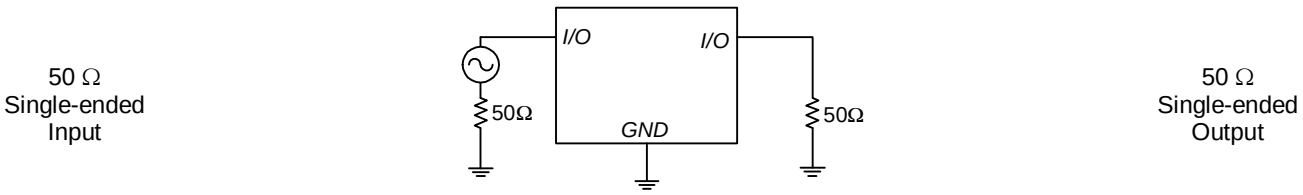
Operating Temperature Range: [2] -40 to +85 °C

Parameter [3]	Minimum	Typical	Maximum	Unit
10dB Center Frequency	1375	1380	1385	MHz
Insertion Loss at Fo	-	2.75	4.0	dB
3 dB Bandwidth [4]	30	40	-	MHz
40 dB Bandwidth [4]	-	140	170	MHz
Amplitude Variation [4] 1370 - 1390 MHz	-	1	2	dB
Input/Output VSWR at Fo	-	1.5	2.25:1	–
Source Impedance	-	50	-	Ω
Load Impedance	-	50	-	Ω

Notes:

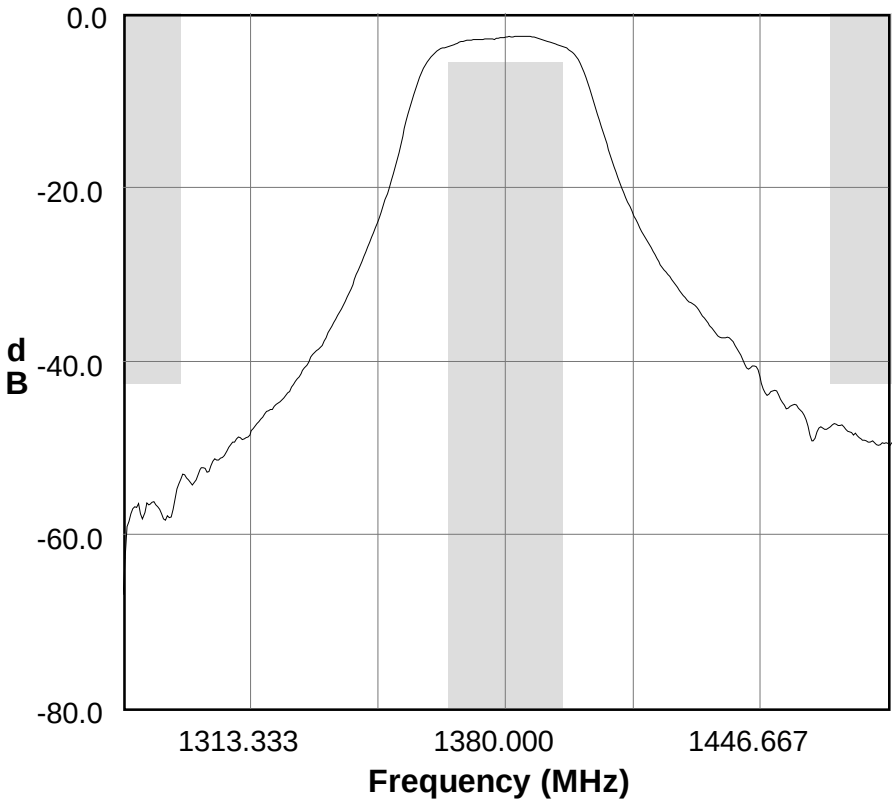
1. All specifications are based on the test circuit shown below
2. In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over temperature
3. Electrical margin has been built into the design to account for the variations due to temperature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

Test Circuit:

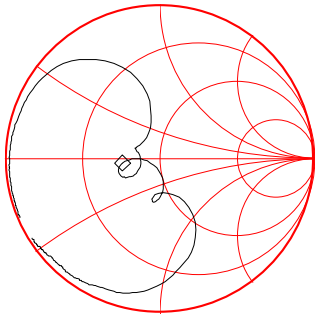


Typical Performance (at +25°C)

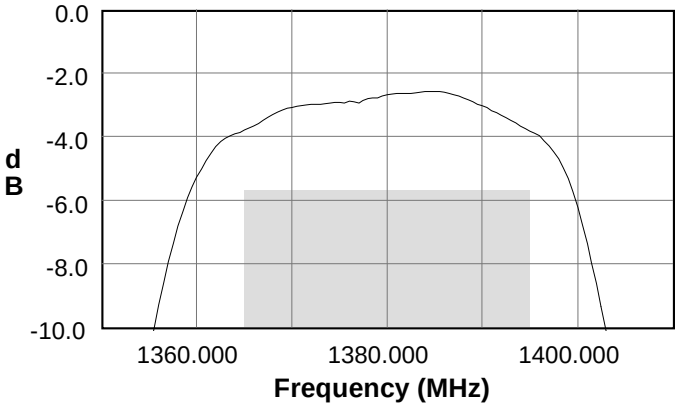
S21 Amplitude Response



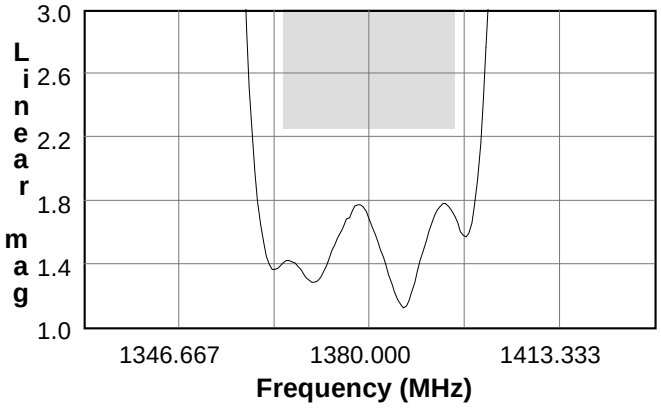
S11 Smith Chart



S21 Amplitude Response



S11 VSWR



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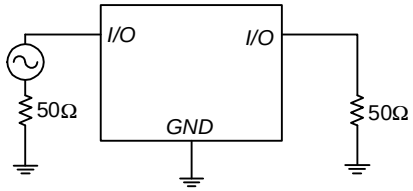
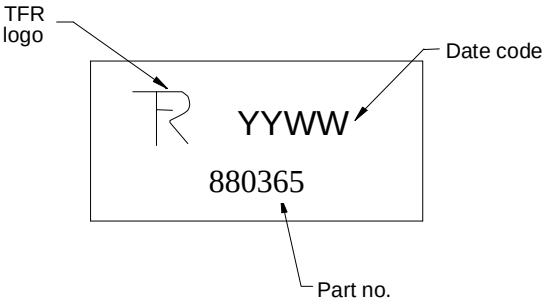
Matching Schematics

50 Ω
Single-ended
Input



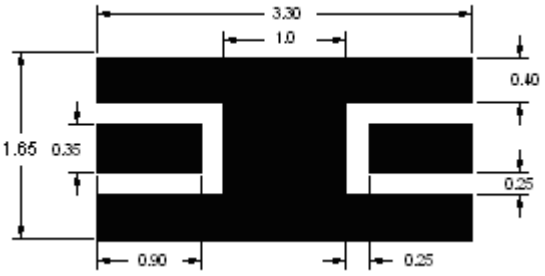
50 Ω
Single-ended
Output

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	^{o}C
Storage Temperature Range	T_{stg}	-55	+100	^{o}C

Warnings

- Electrostatic Sensitive Device (ESD)
- Avoid ultrasonic exposure

Contact Information

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