Target Electrical Specifications [1]

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

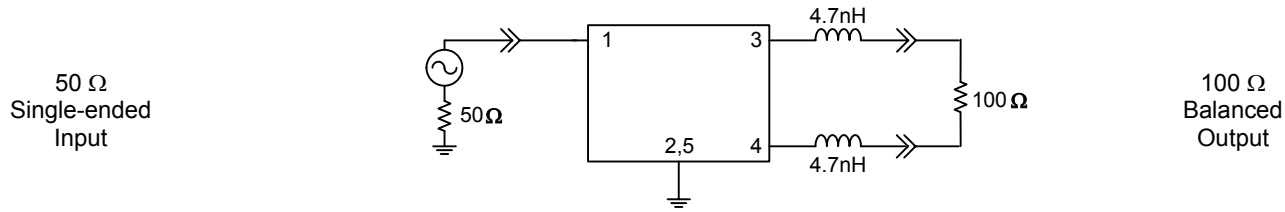
Parameter [3]	Minimum	Typical	Maximum	Unit
Center Frequency	-	2332.5	-	MHz
Maximum Insertion Loss				
2310 - 2355 MHz	-	1.70	2.0	dB
Absolute Attenuation				
0880 - 0960 MHz	35	45	-	dB
1710 - 1900 MHz	30	34	-	
2106 MHz	30	38	-	
2224 MHz	13	21	-	
2453 MHz	12	15	-	
2570 MHz	15	31	-	
Amplitude Variation				
2310 - 2355 MHz	-	0.35	1.0	dB p-p
Output Amplitude Balance ($\|S_{31}/S_{21}\|$)				
2310 - 2355 MHz	-1.5	-	1.5	dB
Output Phase Balance [$\phi(S_{31})-\phi(S_{21})$]				
2310 - 2355 MHz	-7.5	-	7.5	degree
Source Impedance (single-ended) [4]	-	50	-	Ω
Load Impedance (balanced) [4]	-	100	-	Ω

Notes:

1. All target specifications are based on TriQuint 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. This is the optimum impedance in order to achieve the performance shown

Test Circuit:

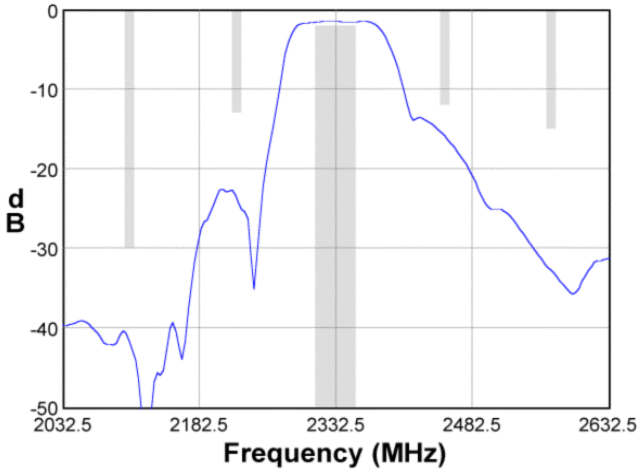
Actual matching values may vary due to PCB layout and parasitics



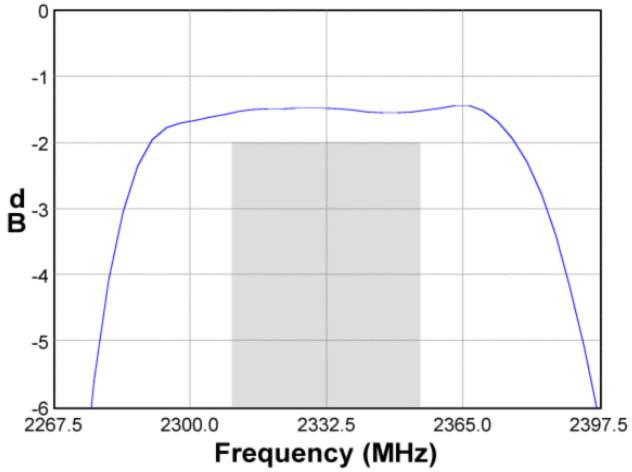
PCB: PCB-5BT V-1
Inductor Kit: LQW15AN4N7D10 0402 series inductors
Port extension: 58psec (input), 43psec (output+), 43psec (output-)

Typical Performance (at +25°C)

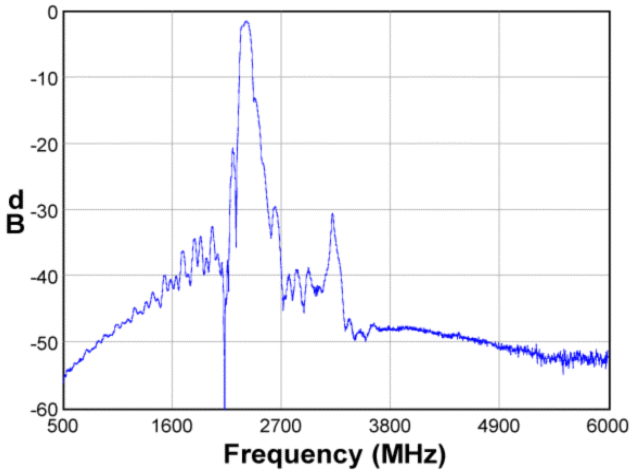
Frequency Response



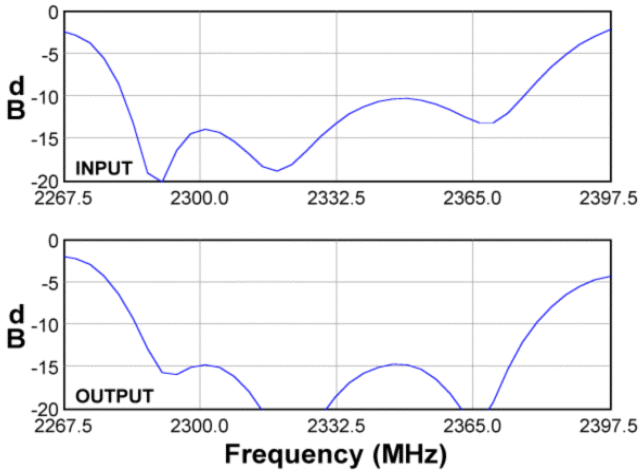
Passband Response



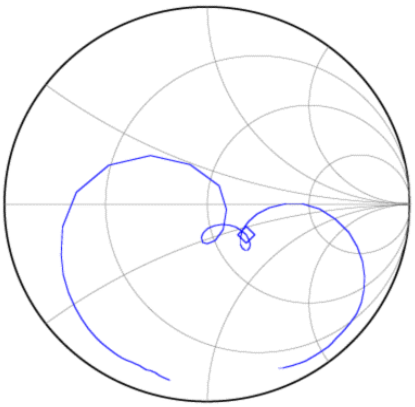
Wideband Response



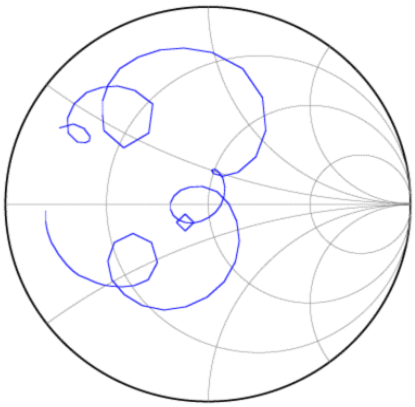
Input/Output Return Loss



Input Smith Chart



Output Smith Chart



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Source Impedance (single-ended) [4]	-	50	-	Ω
Load Impedance (balanced) [4]	-	200	-	Ω

Notes:

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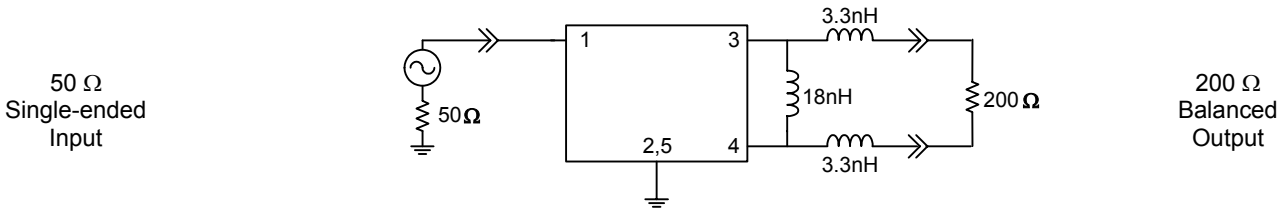
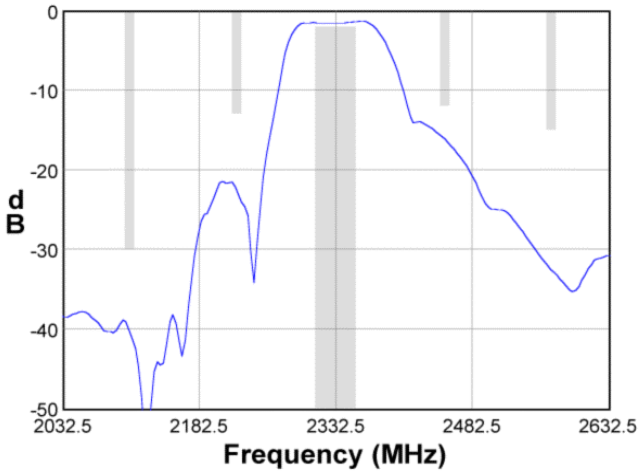


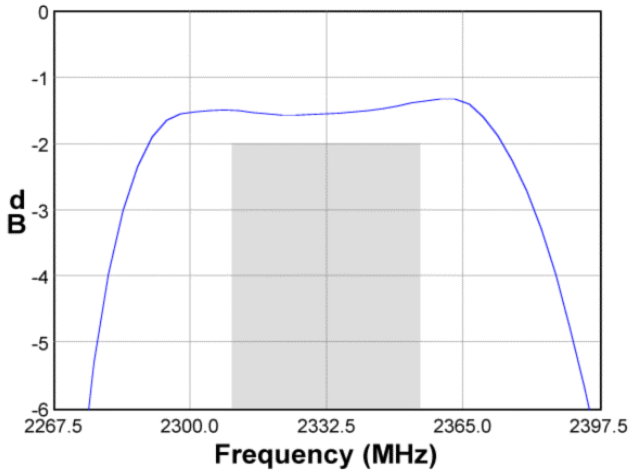
PCB: PCB-5BT V-1
Inductor Kit: LQW15AN4N7D10, LQW15AN18NH00 0402 series inductors
Port extension: 58ps (input), 43ps (output +), 43ps (output -)

Typical Performance (at +25°C)

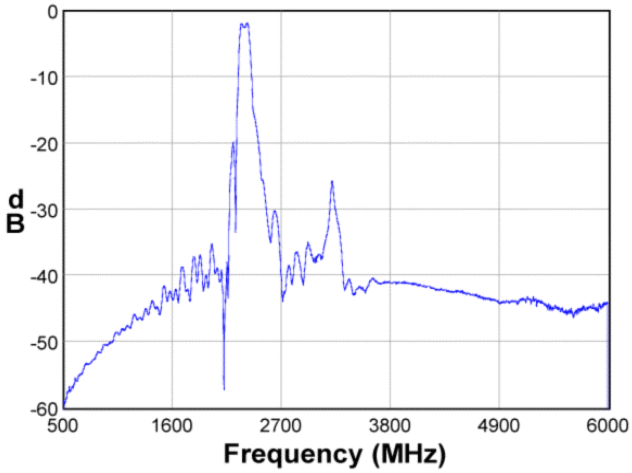
Frequency Response



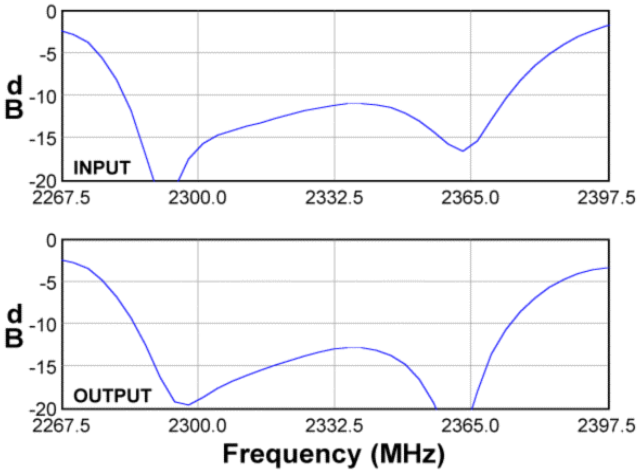
Passband Response



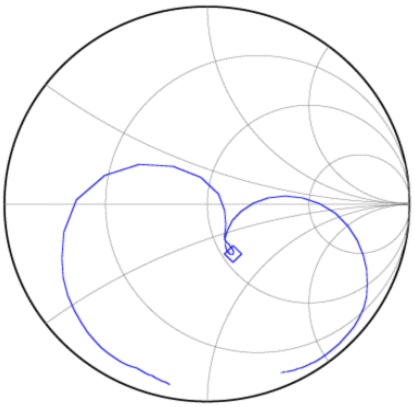
Wideband Response



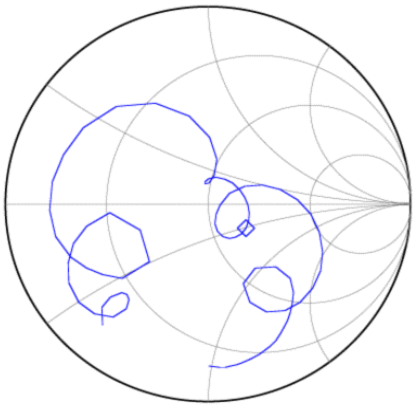
Input/Output Return Loss



Input Smith Chart



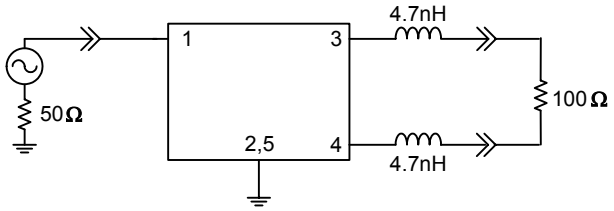
Output Smith Chart



Part Number 856604
2332.5 MHz SAW Filter

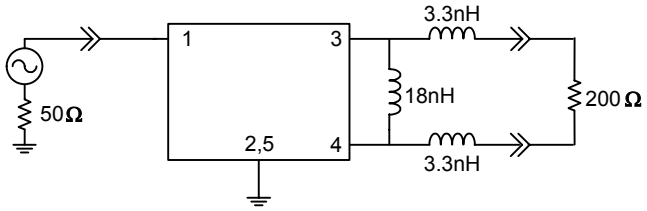
Matching Schematics

50 Ω Single-ended Input



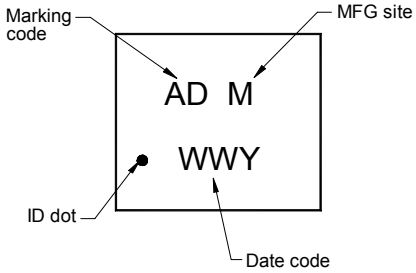
100 Ω Balanced Output

50 Ω Single-ended Input



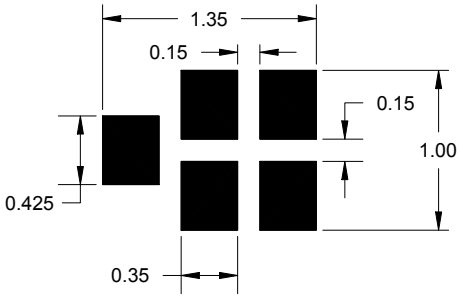
200 Ω Balanced Output

Marking



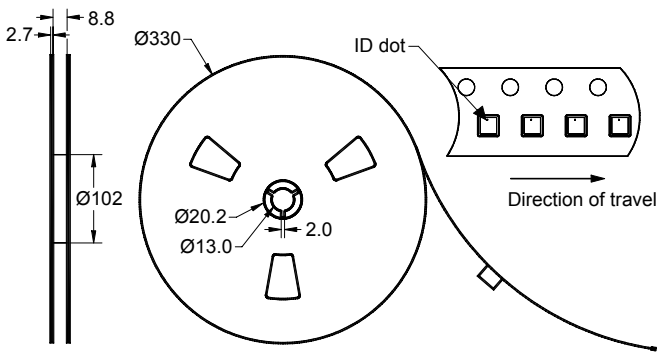
The date code consists of: WW = 2 digit week, Y = last digit of year, M = manufacturing site code

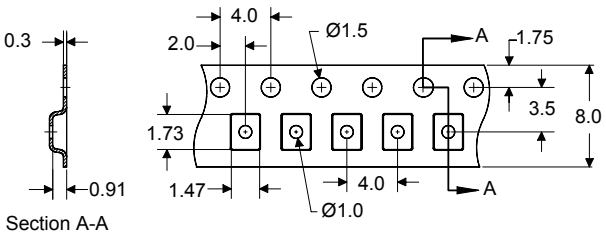
PCB Footprint



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

Tape and Reel





Dimensions shown are nominal in millimeters
Packaging quantity: 10,000 units/reel

TriQuint SEMICONDUCTOR

Data Sheet

Part Number 856604
2332.5 MHz SAW Filter

Maximum Ratings

Parameter	Symbol	Minimum	Maximum	Unit
Operating Temperature Range	T	-40	+85	°C
Storage Temperature Range	T_{stg}	-40	+115	°C

Important Notes

Warnings

- Electrostatic Sensitive Device (ESD)
- Avoid ultrasonic exposure

RoHS Compliance

- This product complies with EU directive 2002/95/EC (RoHS)

Solderability

- Compatible with JEDEC J-STD-020C **Pb**-free process, **260°C** peak reflow temperature (see soldering profile)

Links to Additional Technical Information

PCB Layout Tips | Qualification Flowchart | Soldering Profile

S-Parameters | RoHS Information | Other Technical Information

Contact Information

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USA

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Email: info-product@tqs.com
Web: www.triquint.com

Or contact one of our worldwide Network of sales offices, Representatives or distributors

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