



RF360 Europe GmbH

A Qualcomm – TDK Joint Venture



SAW Components

SAW RF filter for base stations

Partial Band 40 filter

Series/type: B5356
Ordering code: B39242B5356U410

Date: Aug 24, 2015
Version: 2.0

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SAW Components

SAW RF filter for base stations

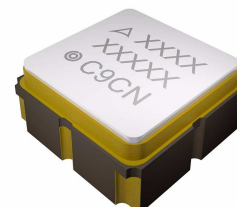
Partial Band 40 filter

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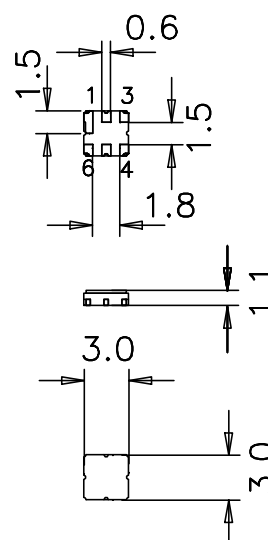
Application

- Partial band 40 filter
- Unbalanced to unbalanced operation
- Low amplitude ripple
- Usable passband 10 MHz
- No matching required for operation at 50 Ω



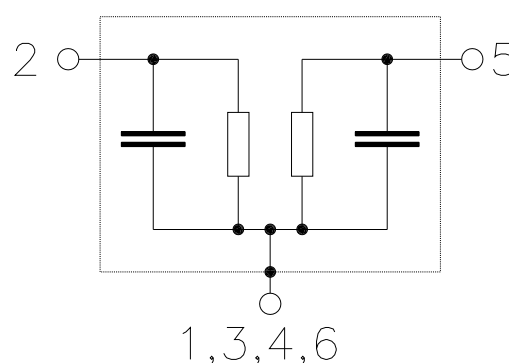
Features

- Package size 3.0 x 3.0 x 1.1 mm³
- Package code DCC6C
- RoHS compatible
- Approximate weight 0.037 g
- Package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- **Electrostatic Sensitive Device (ESD)**
- **Moisture Sensitivity Level 1**
- Filter surface passivated



Pin configuration

- 2 Input
- 5 Output
- 1, 3, 4, 6 To be grounded



SAW Components
B5356
SAW RF filter
2355.0 MHz
Data sheet

Characteristics

Temperature range for specification: $T = -40\text{ }^{\circ}\text{C to }+95\text{ }^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50\text{ }\Omega$
 Terminating load impedance: $Z_L = 50\text{ }\Omega$

		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	2355.0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$	—	1.7	3.0	dB
2350.0 ... 2360.0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.2	1.5	dB
2350.0 ... 2360.0 MHz					
Input VSWR		—	1.2:1	2.0:1	
2350.0 ... 2360.0 MHz					
Output VSWR		—	1.3:1	2.0:1	
2350.0 ... 2360.0 MHz					
Absolute attenuation	α_{abs}				
0.0 ¹⁾ ... 1507.0 MHz		25	42	—	dB
1507.0 ... 1560.0 MHz		25	45	—	dB
1560.0 ... 2200.0 MHz		20	40	—	dB
2200.0 ... 2315.0 MHz		20	31	—	dB
2496.0 ... 2690.0 MHz		30	48	—	dB
2690.0 ... 5000.0 MHz		20	31	—	dB
5000.0 ... 5500.0 MHz		20	31	—	dB
5500.0 ... 6000.0 MHz		10	21	—	dB

¹⁾ Final electric test starts at 10 MHz

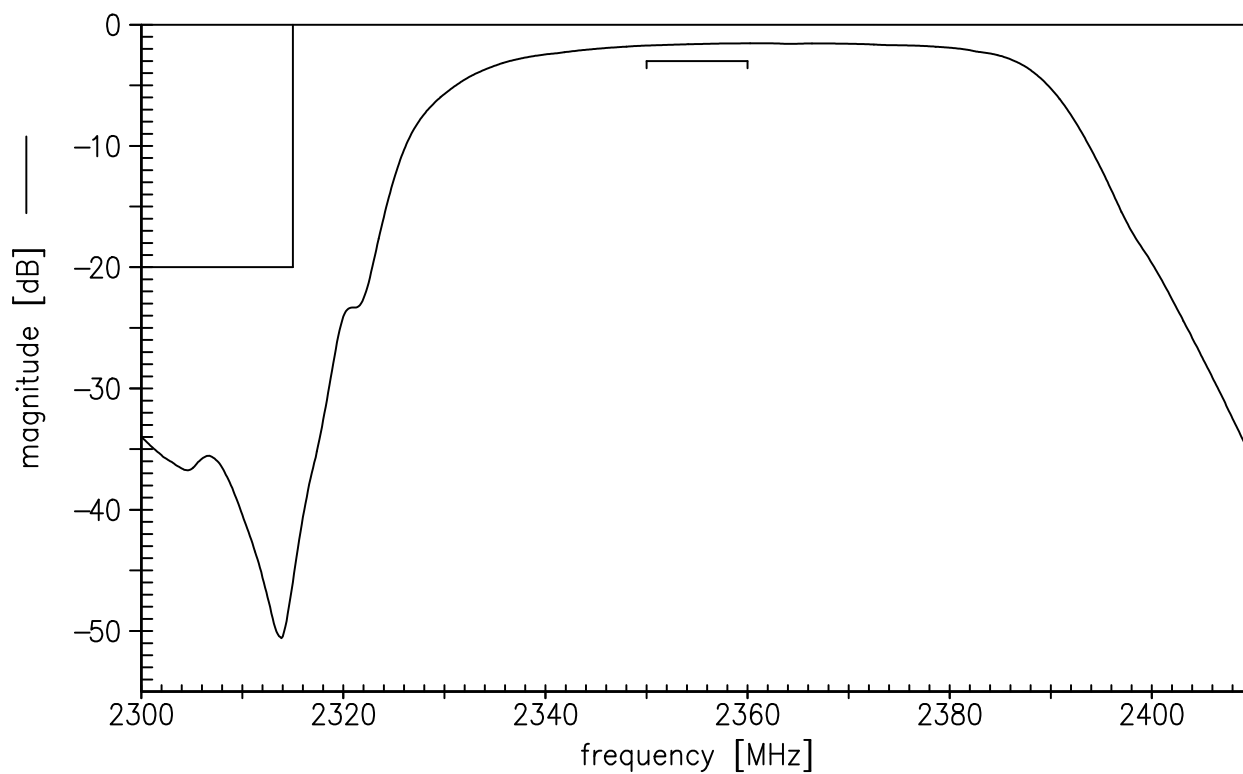
SAW Components
B5356
SAW RF filter
2355.0 MHz

Data sheet

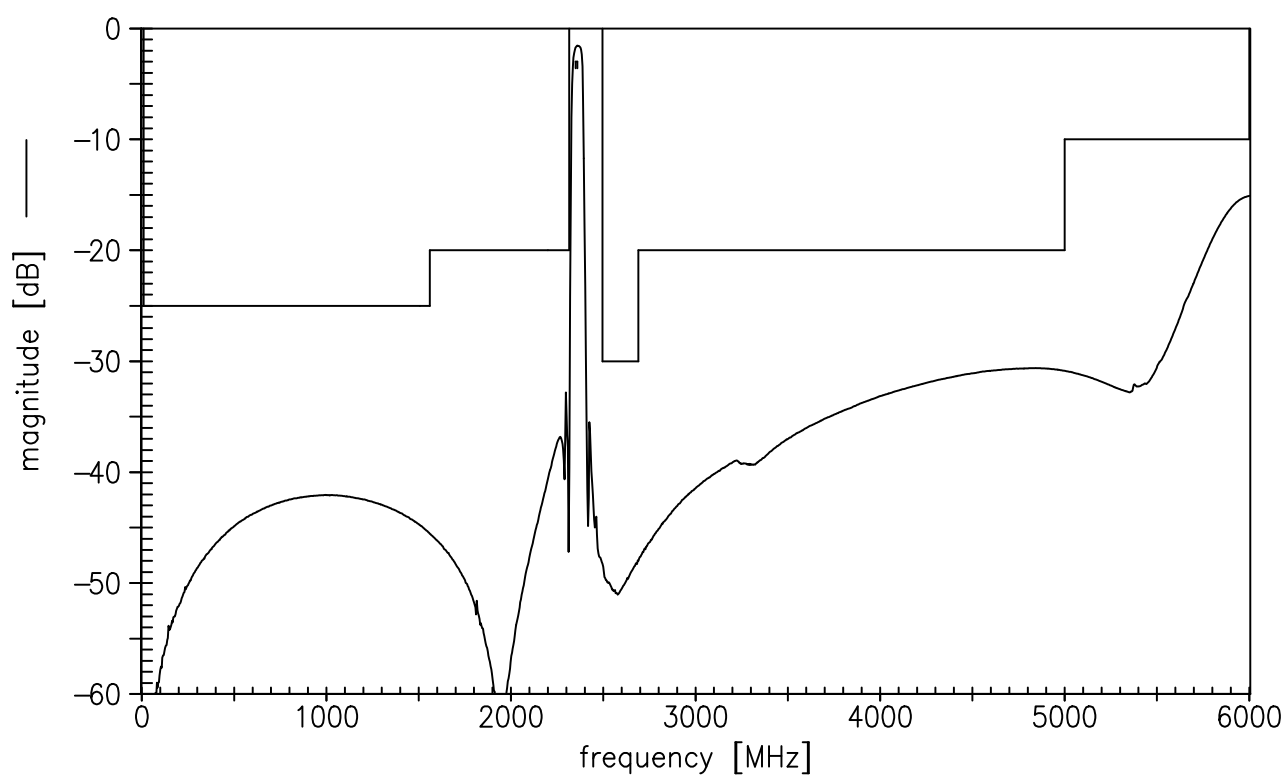

Maximum ratings

Operable temperature range	T	−45/+125	°C	
Storage temperature range	T _{stg}	−45/+125	°C	
Input power	P _{IN}			
2350.0 ... 2360.0 MHz		10	dBm	cw, 100000 h, 95 °C
2350.0 ... 2360.0 MHz		15	dBm	cw, 1000 h, 95 °C
2350.0 ... 2360.0 MHz		22	dBm	cw, 2 h, 95 °C

Transfer function (S21, narrowband)



Transfer function (S21, wideband)

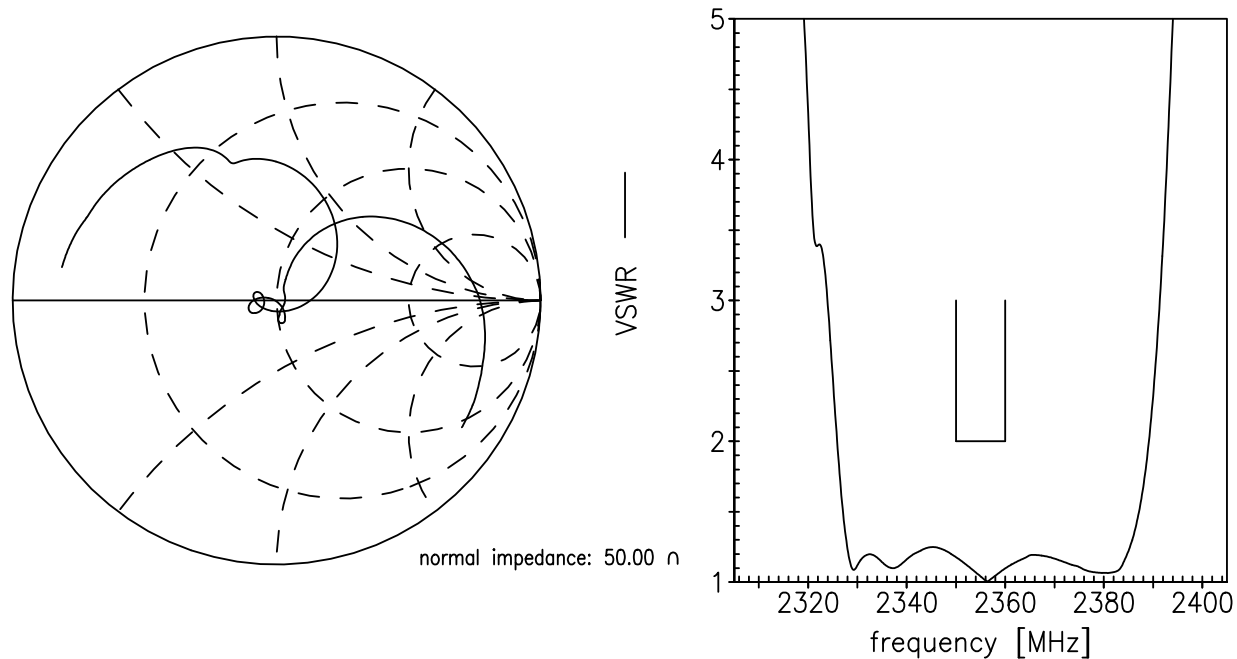


Data sheet

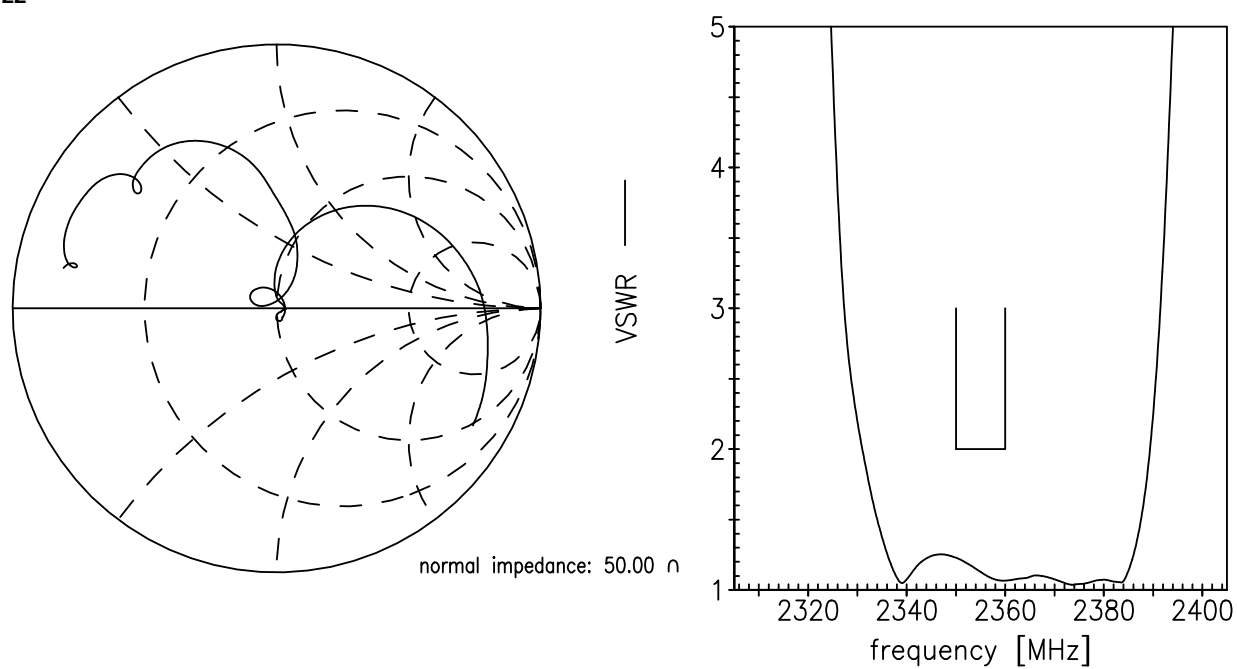
SMD

Smith charts

S₁₁ function



S₂₂ function



SAW Components
B5356
SAW RF filter
2355.0 MHz

Data sheet


References

Type	B5356
Ordering code	B39242B5356U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8228-Z000
Date codes	L_1126
S-parameters	B5356_NB.s2p B5356_WB.s2p see file header for port/pin assignment table
Soldering profile	S_6001
RoHS compatible	RoHS-compatible means that products are compatible with the requirements according to Art. 4 (substance restrictions) of Directive 2011/65/EU of the European Parliament and of the Council of June 8th, 2011, on the restriction of the use of certain hazardous substances in electrical and electronic equipment ("Directive") with due regard to the application of exemptions as per Annex III of the Directive in certain cases.
Matching coils	See Inductor pdf-catalog http://www.tdk.co.jp/tefe02/coil.htm#aname1 and Data Library for circuit simulation http://www.tdk.co.jp/etvcl/index.htm for a large variety of matching coils.

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