

RF360 Europe GmbH

A Qualcomm – TDK Joint Venture

SAW Components

SAW RF filter for base stations

TD-LTE Band 41

Series/type:	B5337
Ordering code:	B39262B5337U410
Date:	Dec 15, 2014
Version:	2.1

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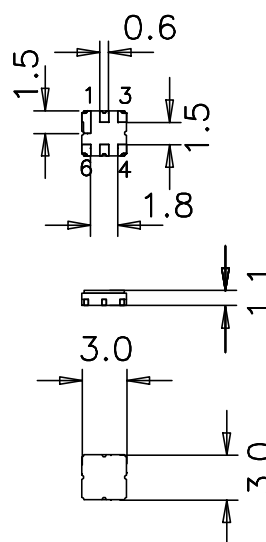
Data sheet

Application

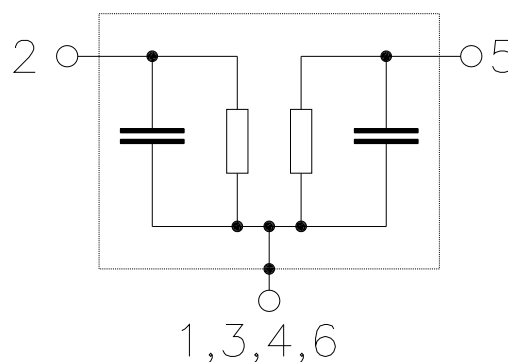
- RF filter for band 41
- Usable passband 194 MHz
- Unbalanced to unbalanced operation
- No matching required for operation at 50 Ω

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



Data sheet


Characteristics

Temperature range for specification:	T = -40 °C to +85 °C
Terminating source impedance:	Z _S = 50 Ω
Terminating load impedance:	Z _L = 50 Ω

		min.	typ. @ 25 °C	max.	
Center frequency	f _C	—	2593.0	—	MHz
Minimum insertion attenuation	α _{min}	—	1.6	2.0	dB
2496.0 ... 2690.0 MHz					
Maximum insertion attenuation	α _{max}	—	2.7	4.5	dB
2496.0 ... 2690.0 MHz					
2555.0 ... 2655.0 MHz		—	2.3	3.0	dB
Amplitude ripple (p-p)	Δα	—	1.1	3.0	dB
2496.0 ... 2690.0 MHz					
2555.0 ... 2655.0 MHz		—	0.7	1.4	dB
Input return loss		8.5	11.0	—	dB
2496.0 ... 2690.0 MHz					
2555.0 ... 2655.0 MHz		8.5	11.0	—	dB
Output return loss		8.5	11.0	—	dB
2496.0 ... 2690.0 MHz					
2555.0 ... 2655.0 MHz		8.5	11.0	—	dB
Group delay ripple (p-p)	Δτ	—	50	100	ns
2496.0 ... 2690.0 MHz					
Relative attenuation (relative to α_{min})	α _{rel}	16	22	—	dB
10.0 ... 1880.0 MHz		18	24	—	dB
1880.0 ... 1920.0 MHz		19	25	—	dB
1920.0 ... 2000.0 MHz		20	26	—	dB
2000.0 ... 2010.0 MHz		20	26	—	dB
2010.0 ... 2025.0 MHz		20	26	—	dB
2025.0 ... 2300.0 MHz		10	19	—	dB
2300.0 ... 2400.0 MHz		18	34	—	dB
2800.0 ... 3000.0 MHz		25	34	—	dB
3000.0 ... 3500.0 MHz		16	30	—	dB
3500.0 ... 4000.0 MHz					

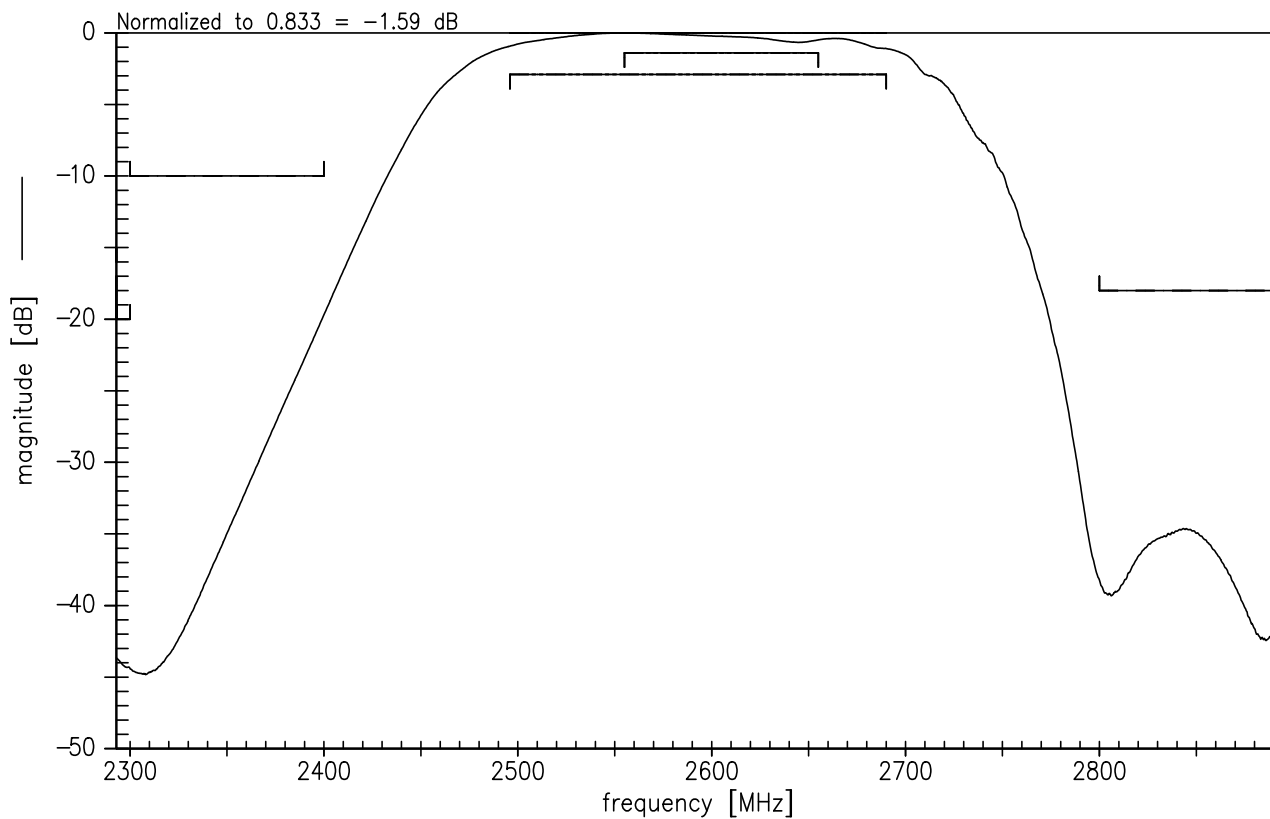
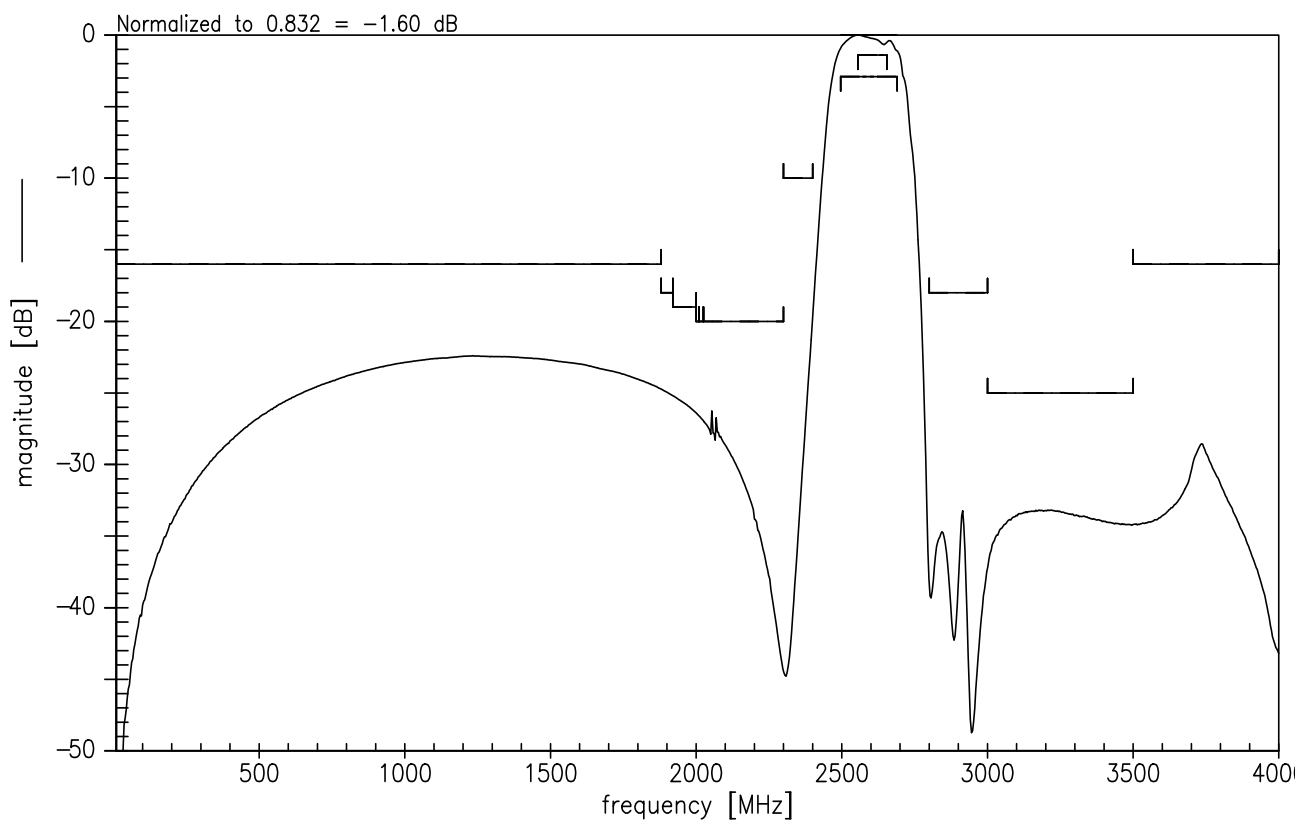
Maximum ratings

Operable temperature range	T	-40/+125	°C	
Storage temperature range	T _{stg}	-40/+125	°C	
DC voltage	V _{DC}	5	V	
ESD voltage	V _{ESD}	50 ¹⁾	V	Machine Model
		150 ²⁾	V	Human Body Model
Input power	P _{IN}			
2496.0 ... 2690.0 MHz		25	dBm	cw, 2 h, 85 °C
2496.0 ... 2690.0 MHz		20	dBm	cw, 1000 h, 85 °C
2496.0 ... 2690.0 MHz		13.5	dBm	cw, 100000 h, 85 °C

1) acc. to JESD22-A115B (MM - Machine Model), 10 negative & 10 positive pulses

2) acc. to JESD22-A114F (HBM - Human Body Model), 1 negative & 1 positive pulses

Data sheet

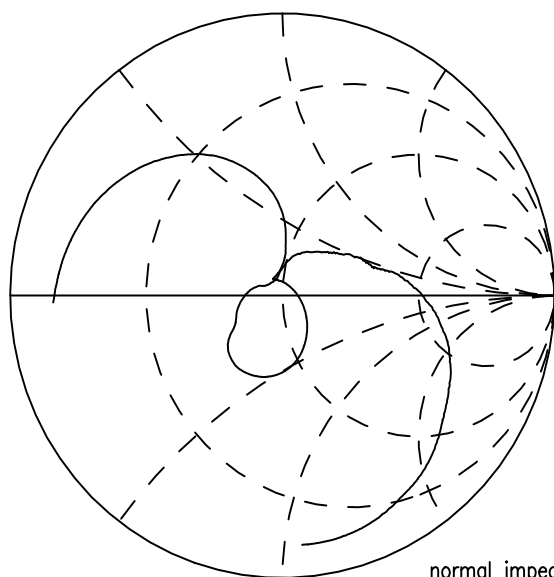
SMD
Transfer function (S21, narrowband)

Transfer function (S21, wideband)


Data sheet

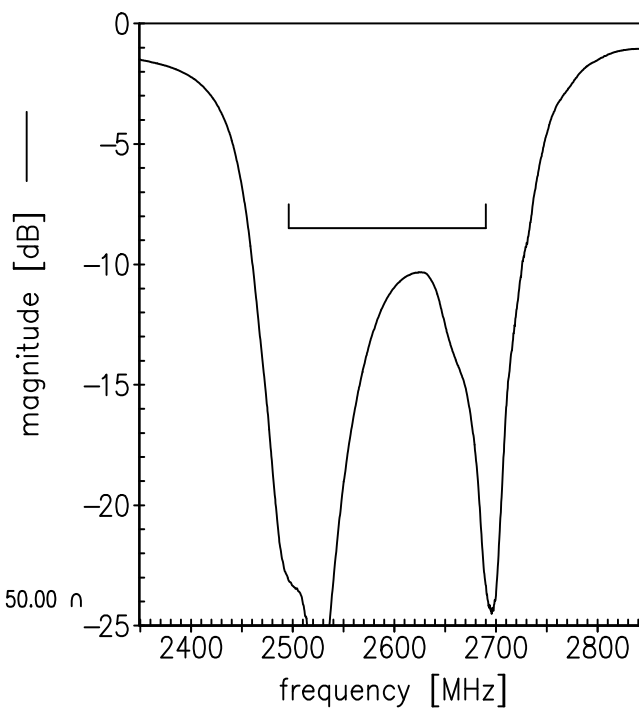
SMD

Smith charts

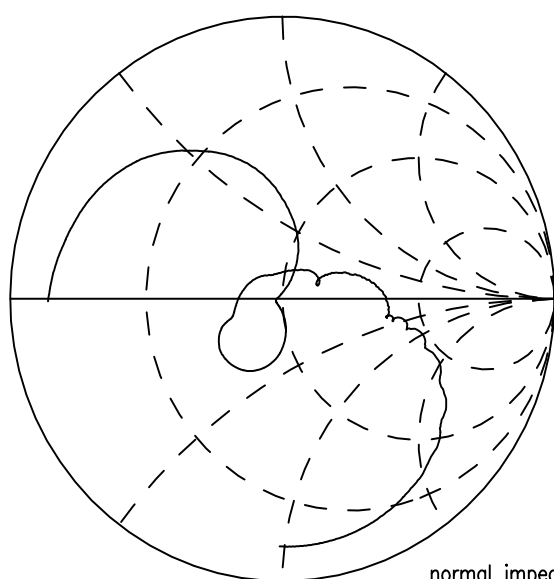
S₁₁ function



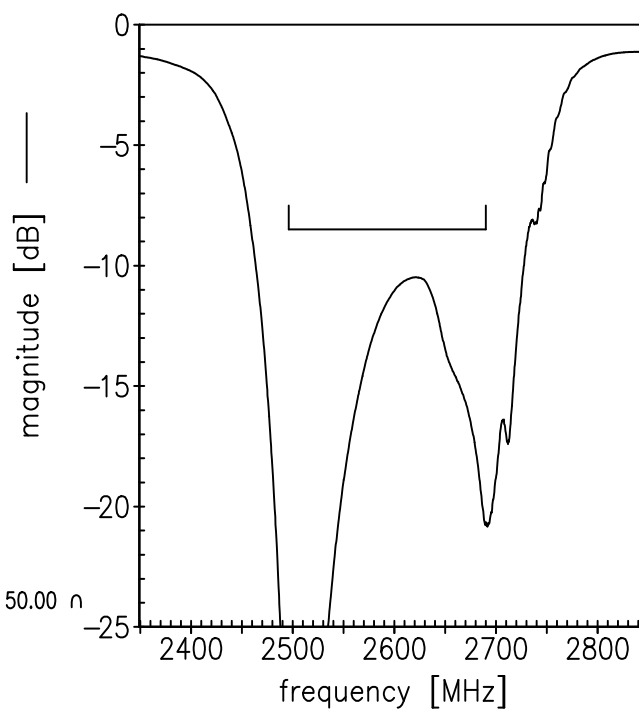
normal impedance: 50.00 Ω



S₂₂ function



normal impedance: 50.00 Ω



References

Type	B5337
Ordering code	B39262B5337U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8228-Z000
Date codes	L_1126
S-parameters	B5337_NB.s2p B5337_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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