



SAW Components

SAW RF filter for base stations

Band 41 downlink

Series/type: B5304
Ordering code: B39262B5304U410

Date: September 17, 2013
Version: 2.0

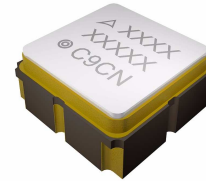
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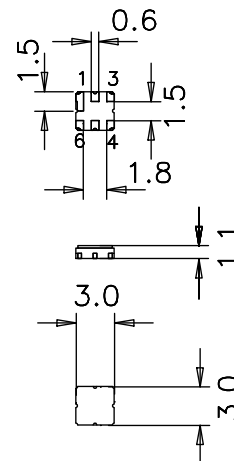
Data sheet

Application

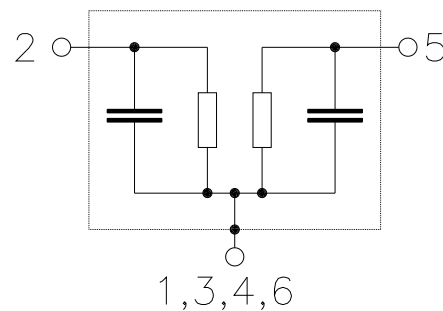
- RF filter for band 41 downlink
- Unbalanced to unbalanced operation
- Low amplitude ripple
- Usable passband 80 MHz
- No matching required for operation at 50 Ω


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



Data sheet

Characteristics

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

		min.	typ. @ 25 °C	max.	
Nominal frequency	f _N	—	2595.0	—	MHz
Maximum insertion attenuation	α _{max}	—	2.0	2.5	dB
2555.0 ... 2635.0 MHz		—			
Amplitude ripple (p-p)	Δα	—	0.6	1.2	dB
2555.0 ... 2635.0 MHz		—			
2555.0 ... 2615.0 MHz		—	0.6	1.0	dB
2575.0 ... 2635.0 MHz		—	0.5	1.0	dB
Group delay ripple (p-p)	Δτ	—	6	15	ns
2555.0 ... 2635.0 MHz		—			
Input VSWR		—	1.6:1	2.0:1	
2555.0 ... 2635.0 MHz		—			
Output VSWR		—	1.7:1	2.0:1	
2555.0 ... 2635.0 MHz		—			
Attenuation	α				dB
0.0 ... 2025.0 MHz		35	42	—	dB
2110.0 ... 2170.0 MHz		35	42	—	dB
2170.0 ... 2432.0 MHz		25	35	—	dB
2432.0 ... 2512.0 MHz		10	25	—	dB
2677.0 ... 2700.0 MHz		20	28	—	dB
2700.0 ... 2757.0 MHz		20	28	—	dB
2800.0 ... 3400.0 MHz		25	33	—	dB
3400.0 ... 3800.0 MHz		25	29	—	dB
3800.0 ... 5000.0 MHz		20	28	—	dB
5000.0 ... 6000.0 MHz		10	25	—	dB

SAW Components	B5304
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SAW RF filter	2595.0 MHz
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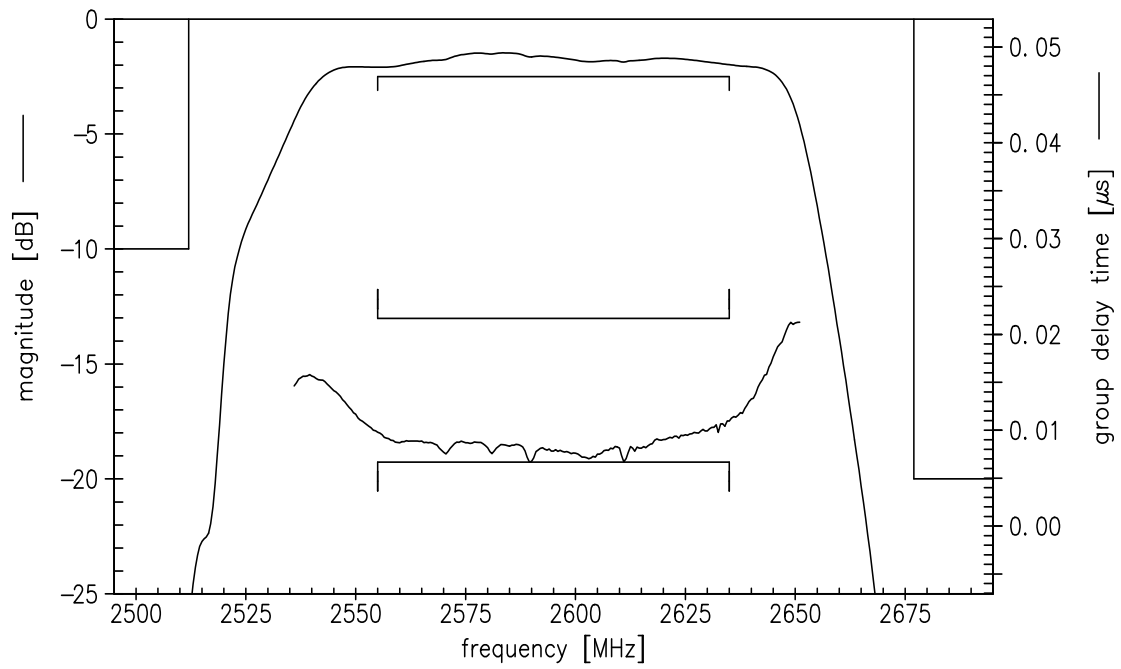
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SMD

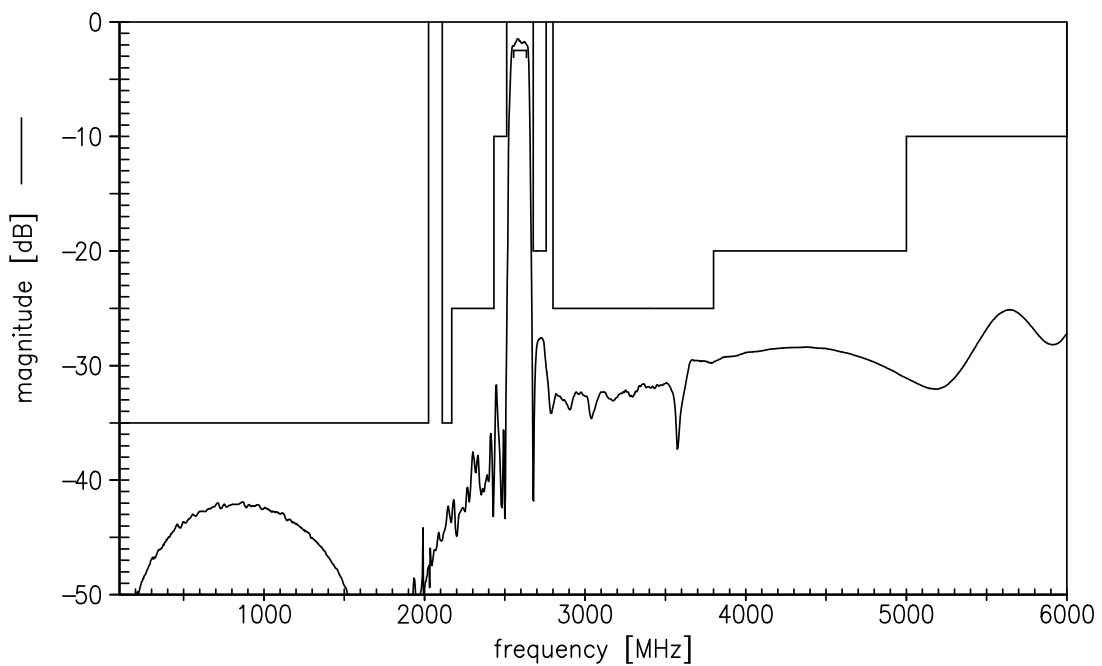
Maximum ratings

Operable temperature range	T	-40/+85	°C	
Storage temperature range	T _{stg}	-40/+85	°C	
Input power				
2555.0 ... 2635.0 MHz	P _{IN}	15	dBm	cw, 1000 h, 85°C

Transfer function (S21,narrow band)



Transfer function (S21, wide band)

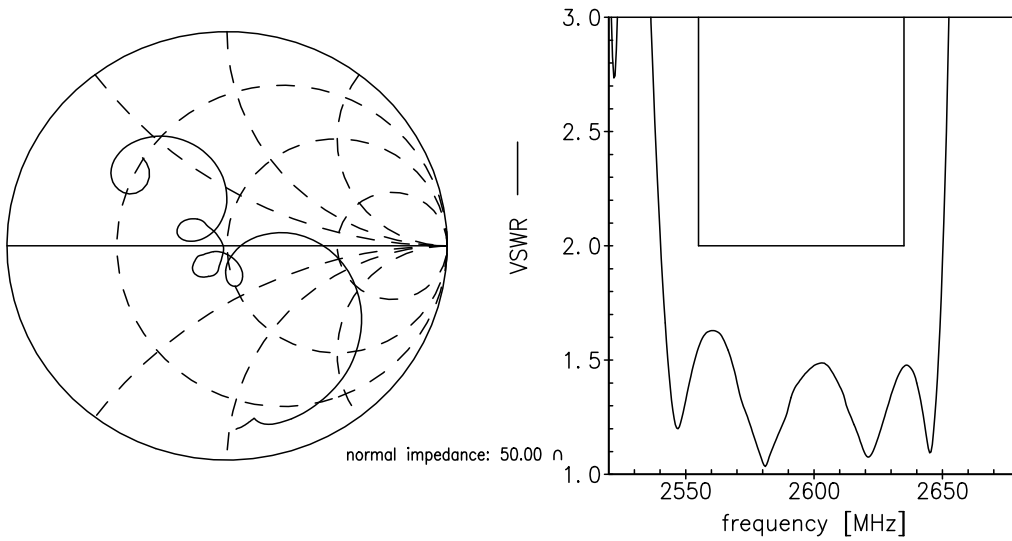


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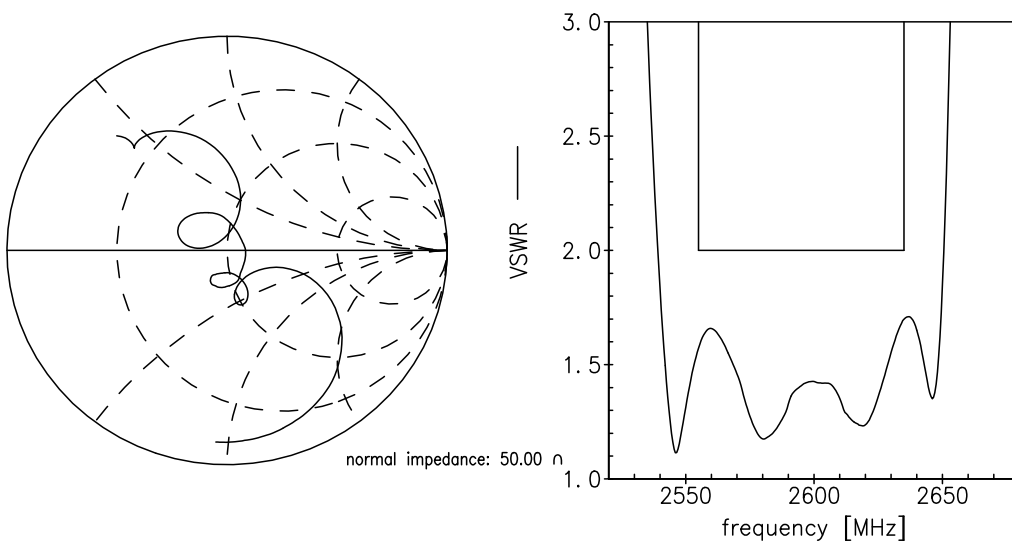
SMD

Smith charts

S₁₁ function



S₂₂ function



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SAW RF filter	2595.0 MHz

Data sheet



References

Type	B5304
Ordering code	B39262B5304U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8228-Z000
Date codes	L_1126
S-parameters	B5304_NB.s2p B5304_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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