

RF360 Europe GmbH

A Qualcomm – TDK Joint Venture

SAW Components

SAW RF filter

GSM 1900

Series/type:	B5104
Ordering code:	B39192B5104U410
Date:	September 10, 2008
Version:	2.2

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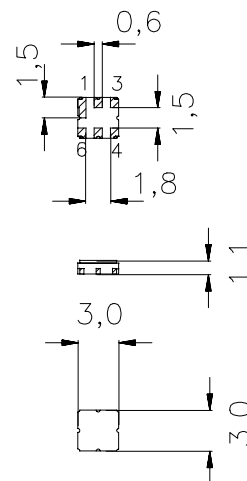
Data Sheet

Application

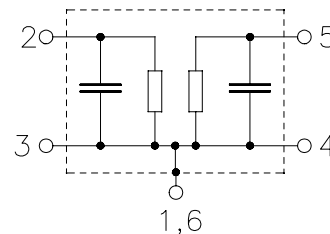
- RF filter for GSM1900 base station
- Low ripple
- Small size
- Single ended operation on 50 Ω


Features

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


Pin configuration

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



Data Sheet

Characteristics

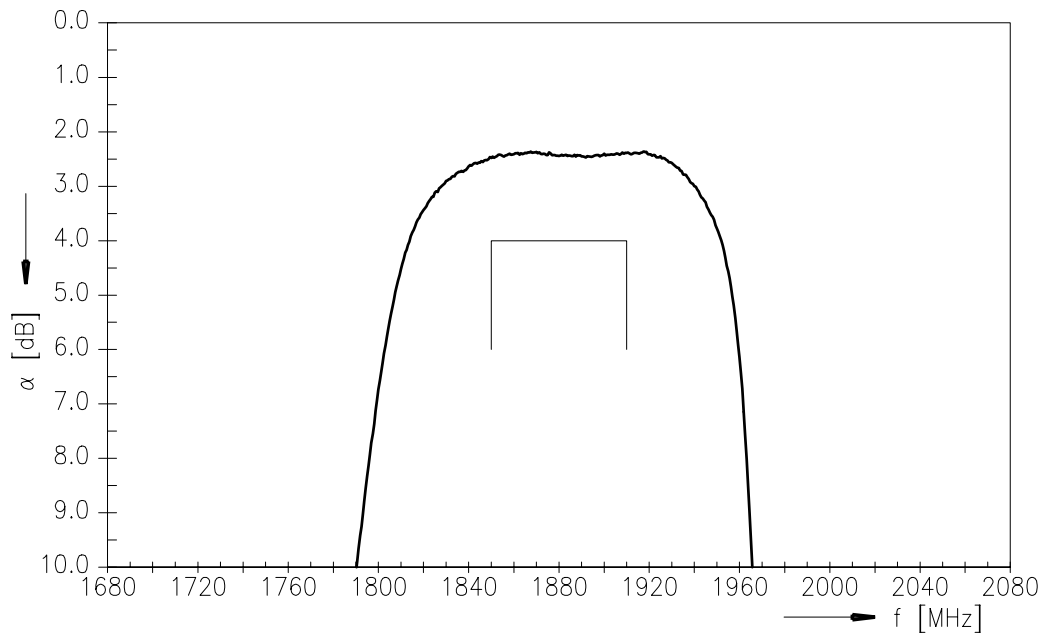
Temperature range for specification:	$T = -35$ to $+85$ °C
Terminating source impedance:	$Z_S = 50 \Omega$ (unbalanced)
Terminating load impedance:	$Z_L = 50 \Omega$ (unbalanced)

		LI35A 1)			
		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	1880	—	MHz
Minimum insertion attenuation	α_{\min}	---	2.3	3.0	dB
1850.0 ... 1910.0 MHz					
Maximum insertion attenuation	α_{\max}	---	2.6	4.0	dB
1850.0 ... 1910.0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.3	1.0	dB
1850.0 ... 1910.0 MHz					
VSWR		—	1.75	2.1	
1850.0 ... 1910.0 MHz					
Attenuation	α	30.0	36.0	---	dB
1448.0 ... 1508.0 MHz					
Temperature coefficient of frequency	TC_f	—	-64	—	ppm/K

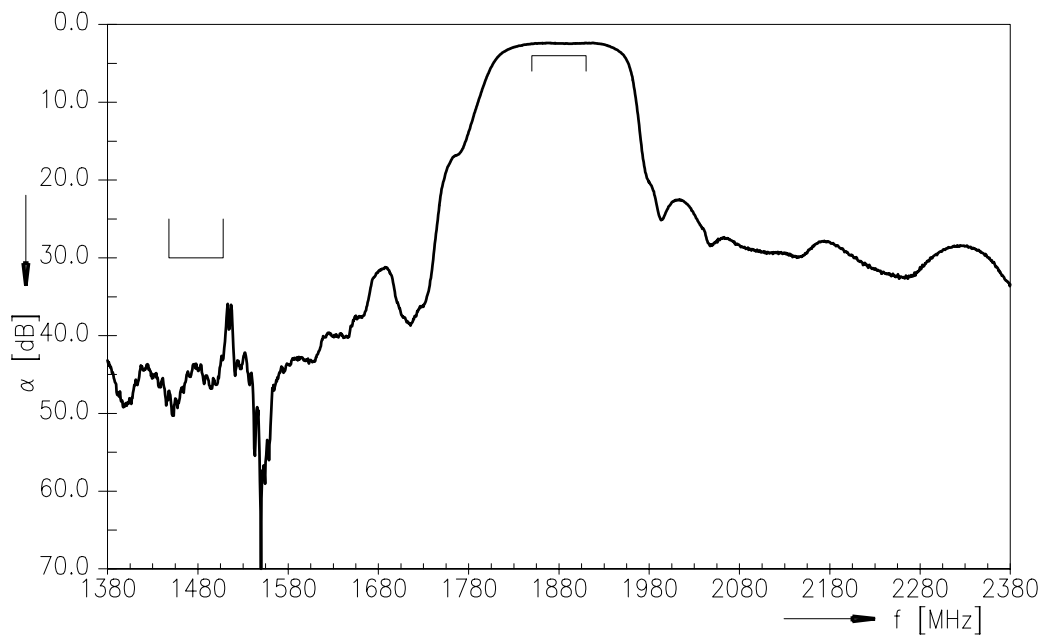
1) Values in columns min, typ and max indicate the development status of the current version.



Transfer function



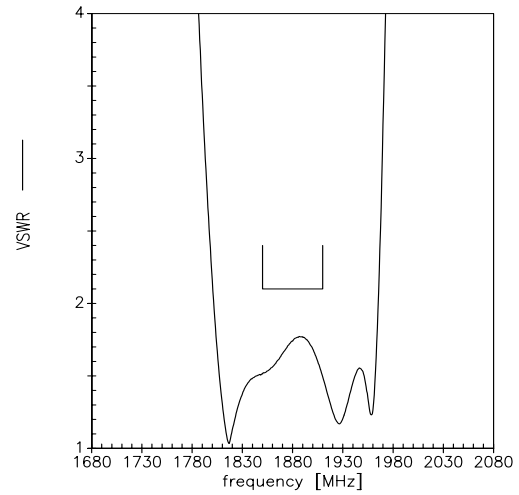
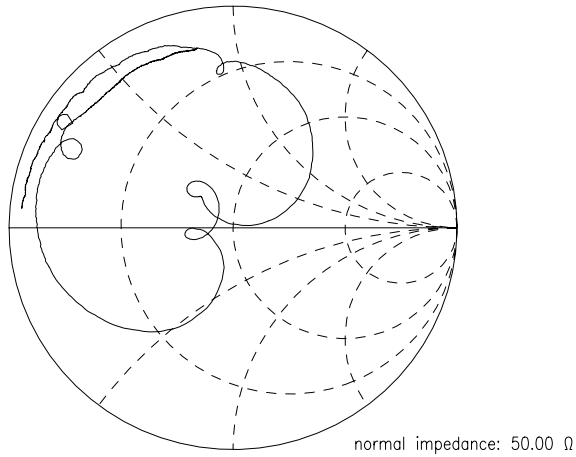
Transfer function (wideband)



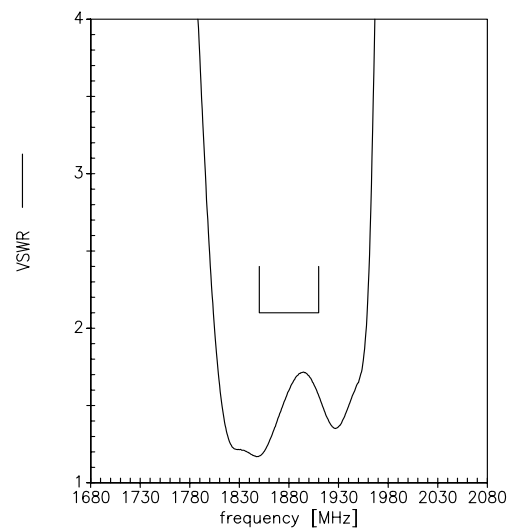
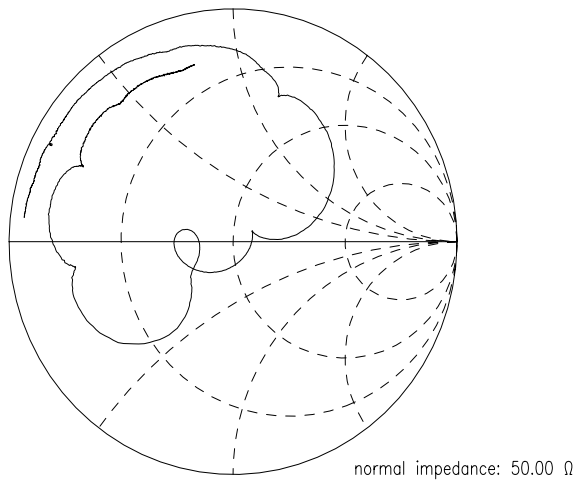
Data Sheet



Smith charts



S_{22} function



SAW Components

B5104

SAW RF filter

1880 MHz

Data Sheet



Maximum ratings

Operable temperature range	T	-35/+85	°C	
Storage temperature range	T _{sta}	-40/+85	°C	
DC voltage	V _{DC}	0	V	
Input power	P _{in}	15	dBm	

SAW Components	B5104
SAW RF filter	1880 MHz

Data Sheet



References

Type	B5104
Ordering code	B39192B5104U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date code	L_1126
S-parameters	LI35A_NB.s2p
Soldering profile	S_6001
RoHS compatible	<p>defined as compatible with the following documents:</p> <p>"DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment. 2005/618/EC from April 18th, 2005, amending Directive 2002/95/EC of the European Parliament and of the Council for the purposes of establishing the maximum concentration values for certain hazardous substances in electrical and electronic equipment."</p>

For further information please contact your local EPCOS sales office or visit our webpage at www.epcos.com.

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