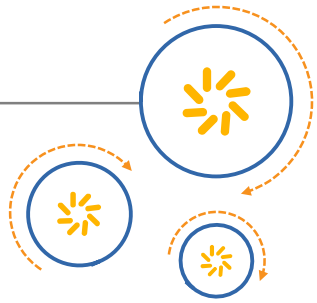
RF360 Europe GmbH

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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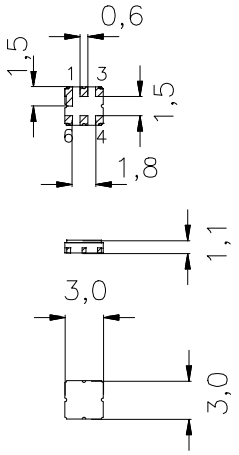
EPCOS AG is a TDK Group Company.

Application

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

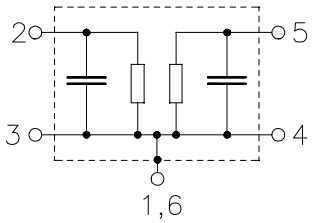
Features

- Package size 3.0 x 3.0 x 1.1 mm³
- Package code DCC6C
- RoHS compatible
- Approx. weight 0.037 g
- Package for **S**urface **M**ount **T**echnology (**SMT**)
- Ni, gold-plated terminals
- **E**lectrostatic **S**ensitive **D**evice (**ESD**)
- Filter surface passivated



Pin configuration

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



Data Sheet SMD

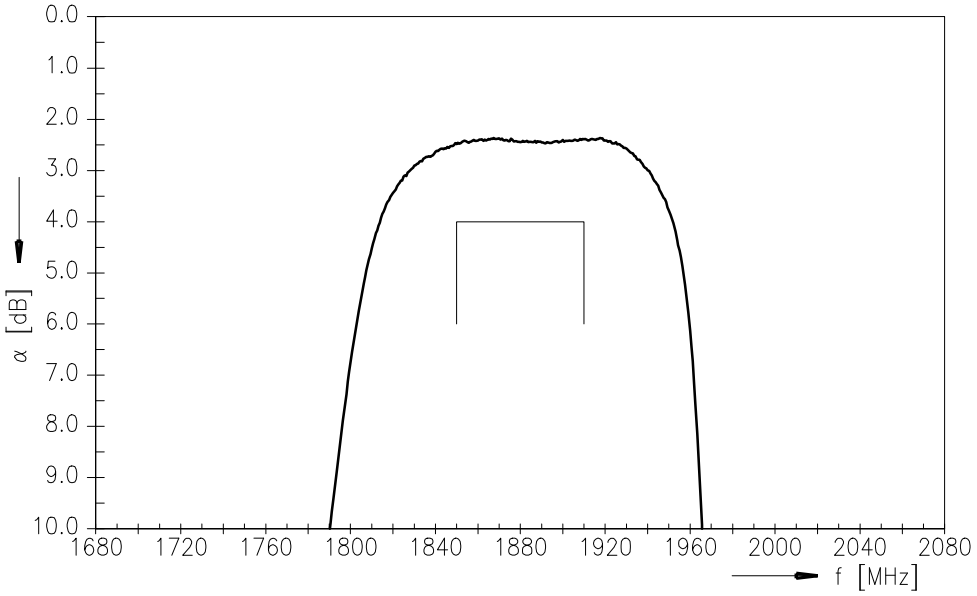
Characteristics

Temperature range for specification: T = -35 to +85 ˚C
Terminating source impedance: Z_S = 50 Ω (unbalanced)
Terminating load impedance: Z_L = 50 Ω (unbalanced)

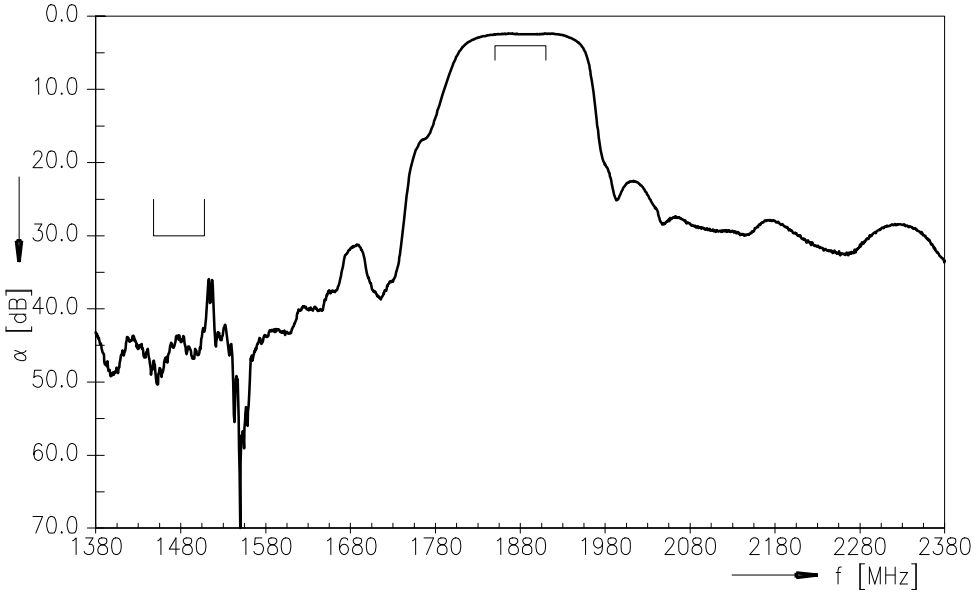
		LI35A [1]			
		min.	**typ. @ 25 ˚C**	**max.**	
Center frequency	f_C	—	1880	—	MHz
Minimum insertion attenuation 1850.0 ... 1910.0 MHz	α_{min}	---	2.3	3.0	dB
Maximun insertion attenuation 1850.0 ... 1910.0 MHz	α_{max}	---	2.6	4.0	dB
Amplitude ripple (p-p) 1850.0 ... 1910.0 MHz	$\Delta\alpha$	—	0.3	1.0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

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

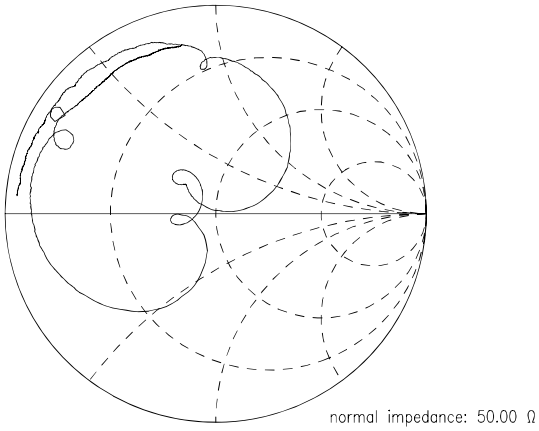
Transfer function

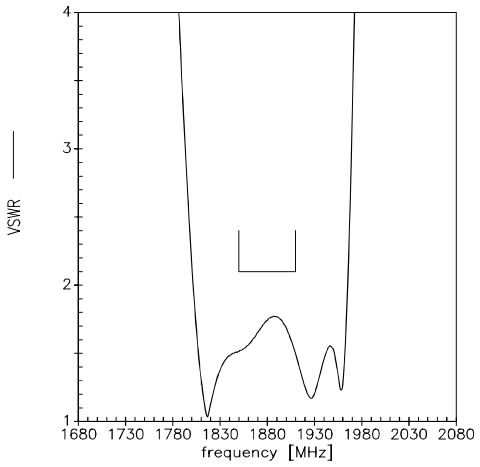


Transfer function (wideband)

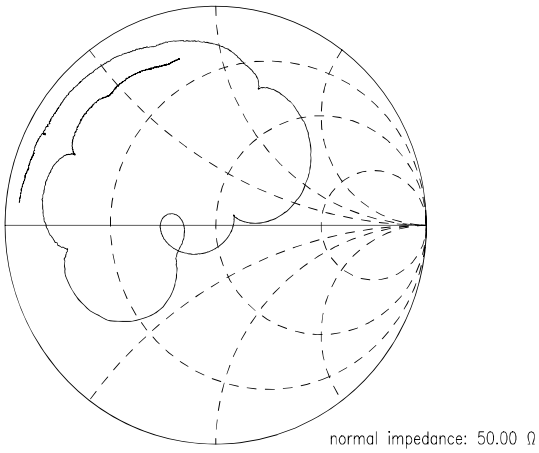


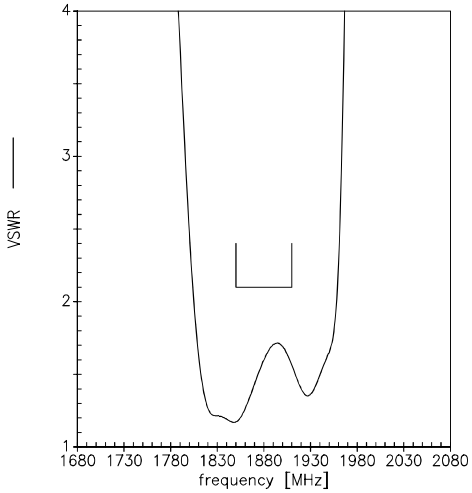
Smith charts





S_{22} function





Maximun ratings

Operable temperature range	T	–35/+85	˚C	
Storage temperature range	T_{stg}	–40/+85	˚C	
DC voltage	V_{DC}	0	V	
Input power	P_{in}	15	dBm	

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	defined as compatible with the following documents: "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."

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

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