

RF360 Europe GmbH

A Qualcomm – TDK Joint Venture

SAW Components

SAW Rx filter

R-GSM

Series/type:	B5056
Ordering code:	B39901B5056U410
Date:	December 4, 2007
Version:	2.1

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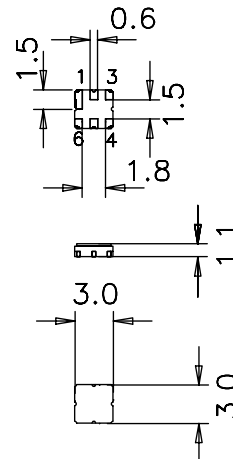
Data Sheet

Application

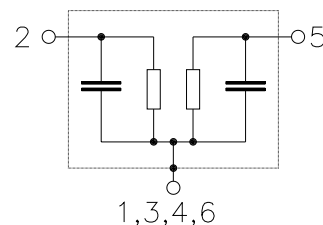
- Low-loss RF filter for base station R-GSM systems, receive path (Rx)
- Low amplitude ripple
- Unbalanced to unbalanced operation
- No external matching required
- Usable passband 39 MHz


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)**


Pin configuration

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



Data Sheet

Characteristics

Temperature range for specification:	T = -30 °C to +80 °C
Terminating source impedance:	Z _S = 50Ω
Terminating load impedance:	Z _L = 50Ω

		min.	typ. @ 25 °C	max.	
Center frequency	f _C	—	895.5	—	MHz
Maximum insertion attenuation	α _{max}				
876.0 ... 915.0 MHz		—	2.1	3.2 ¹⁾	dB
Amplitude ripple (p-p)	Δα				
876.0 ... 915.0 MHz		—	1.2	2.0 ²⁾	dB
Return loss (VSWR)					
876.0 ... 915.0 MHz		—	2.2	3.0	
Attenuation	α				
0.3 ... 856.0 MHz		17	19	—	dB
925.0 ... 935.0 MHz		3 ³⁾	10	—	dB
935.0 ... 2000.0 MHz		20	22	—	dB

1) 2.5dB max at +25°C

2) 1.5dB max at +25°C

3) 6.0dB max at +25°C

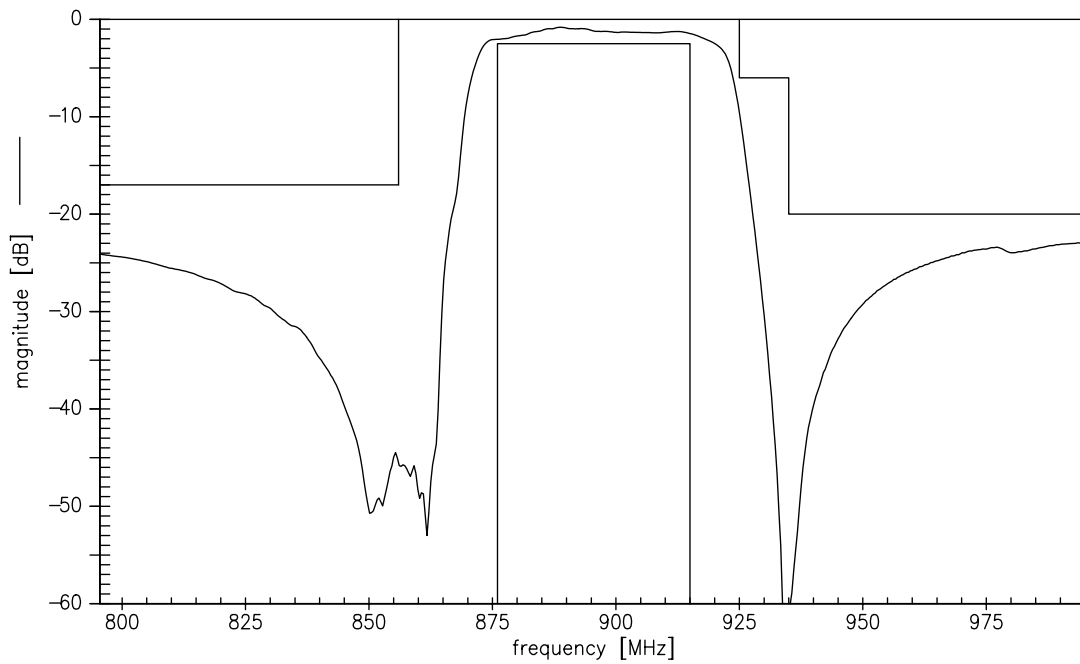

Maximum ratings

Operable temperature range	T	-40/+85	°C	
Storage temperature range	T _{stg}	-40/+85	°C	
DC voltage	V _{DC}	5	V	
ESD voltage	V _{ESD}	50 ¹⁾	V	machine model, 10 pulses
Input power at 876.0 ... 915.0MHz	P _{IN}	17	dBm	CW

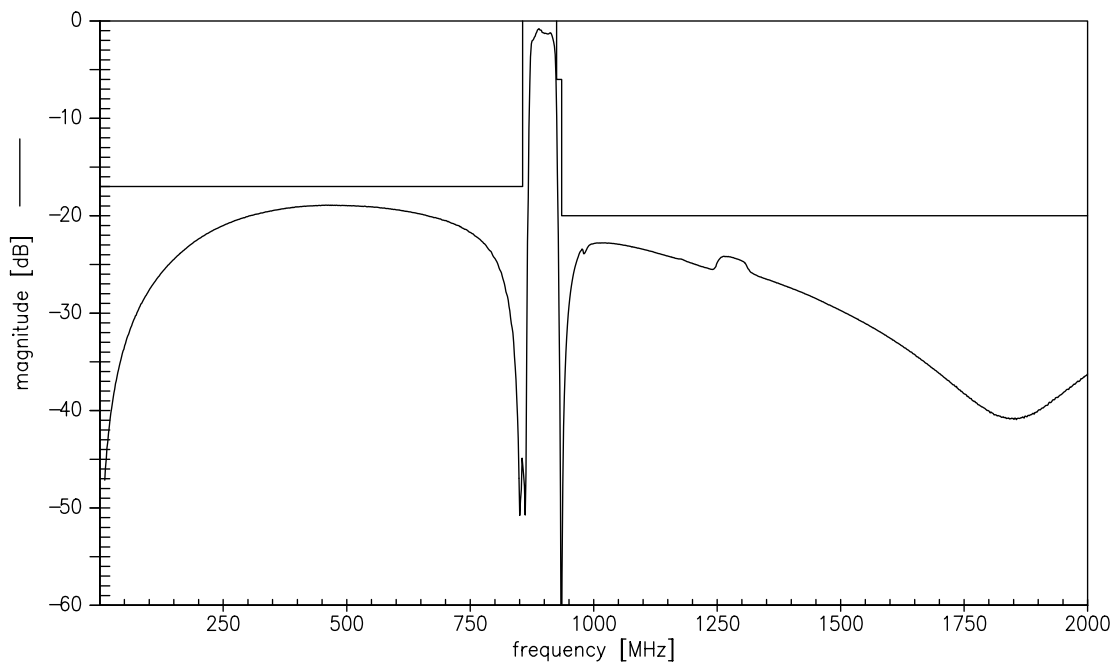
¹⁾ acc. to JESD22-A115A (machine model), 10 negative & 10 positive pulses.



Transfer function



Transfer function (wideband)

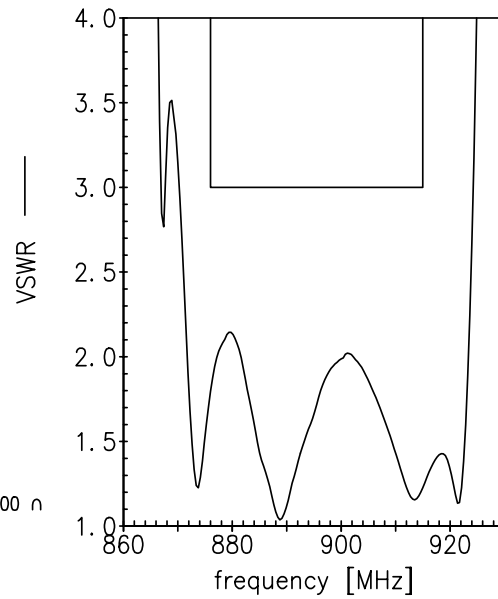
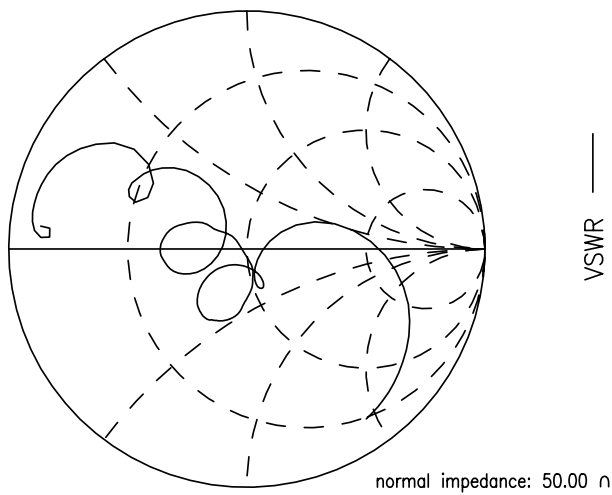


Data Sheet

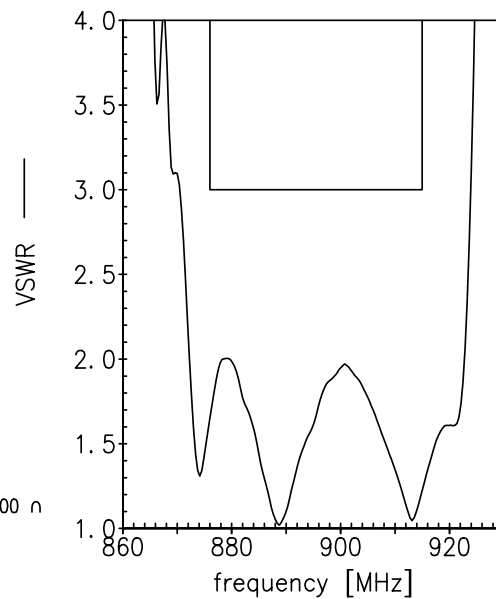
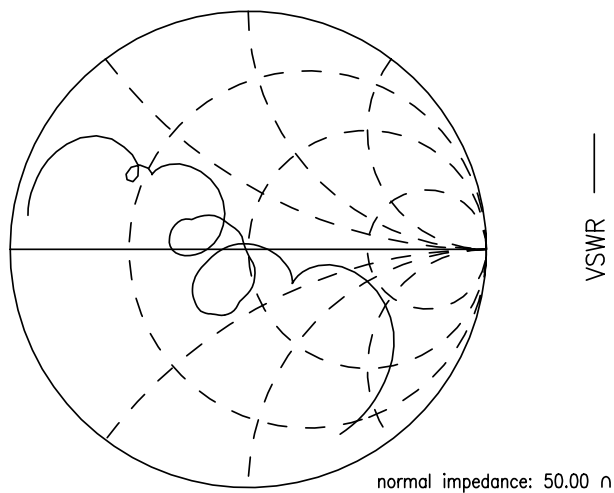


Smith charts

S_{11} function



S_{22} function




References

Type	B5056
Ordering code	B39901B5056U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B5056_NB.s2p B5056_WB.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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