



SAW Components

SAW Rx Filter

Low Loss Filter for Mobile Communication

Series/type: **B4684**

Ordering code: **B39951B4684Z610**

Date: May 19, 2009

Version: 2.0

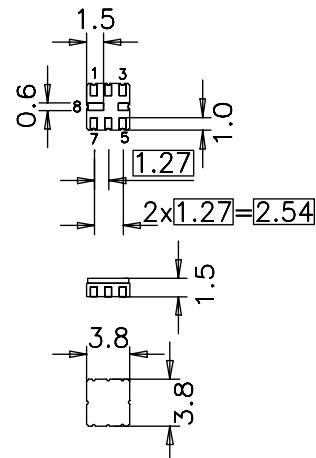
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B4684
SAW Rx Filter
947.50 MHz
Data Sheet

Application

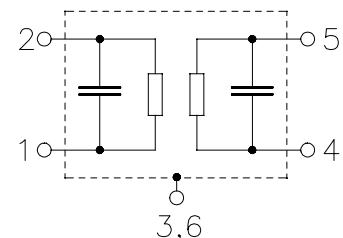
- Low-loss RF filter for mobile telephone, receive path
- Low amplitude ripple
- Usable passband 25MHz
- No matching required for operation at 50 Ω


Features

- Package size 3.8 x 3.8 x 1.5 mm³
- Package code DCC6
- Approx. weight 0.07 g
- Ceramic package for **Surface Mount Technology (SMT)**
- RoHS compliant
- Ni, gold-plated


Pin configuration

- 2 Input
- 1 Input - ground
- 5 Output
- 4 Output - ground
- 3,6 Case ground



Please read *cautions and warnings and important notes* at the end of this document.

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Characteristics

 Temperature range for specification: $T = 25 \pm 2^\circ\text{C}$

 Terminating source impedance: $Z_S = 50 \Omega$

 Terminating load impedance: $Z_L = 50 \Omega$

			min.	typ. @ 25 °C	max.	
Center frequency		f_C	—	947.50	—	MHz
Maximum insertion attenuation		α_{\max}	—	3.0	3.5	dB
935.0 ... 960.0	MHz					
Amplitude ripple (p-p)		$\Delta\alpha$	—	0.7	1.0	dB
935.0 ... 960.0	MHz					
Attenuation		α				
0.0 ... 600.0	MHz		50	65	—	dB
600.0 ... 700.0	MHz		45	60	—	dB
700.0 ... 890.0	MHz		40	50	—	dB
890.0 ... 915.0	MHz		32	40	—	dB
915.0 ... 927.0	MHz		4	12	—	dB
980.0 ... 1000.0	MHz		22	27	—	dB
1000.0 ... 1030.0	MHz		32	36	—	dB
1030.0 ... 1500.0	MHz		40	50	—	dB
1500.0 ... 1900.0	MHz		35	48	—	dB
1900.0 ... 2500.0	MHz		15	24	—	dB
2500.0 ... 2900.0	MHz		10	18	—	dB

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Characteristics

 Temperature range for specification: $T = -10$ to $+75$ °C

 Terminating source impedance: $Z_S = 50 \Omega$

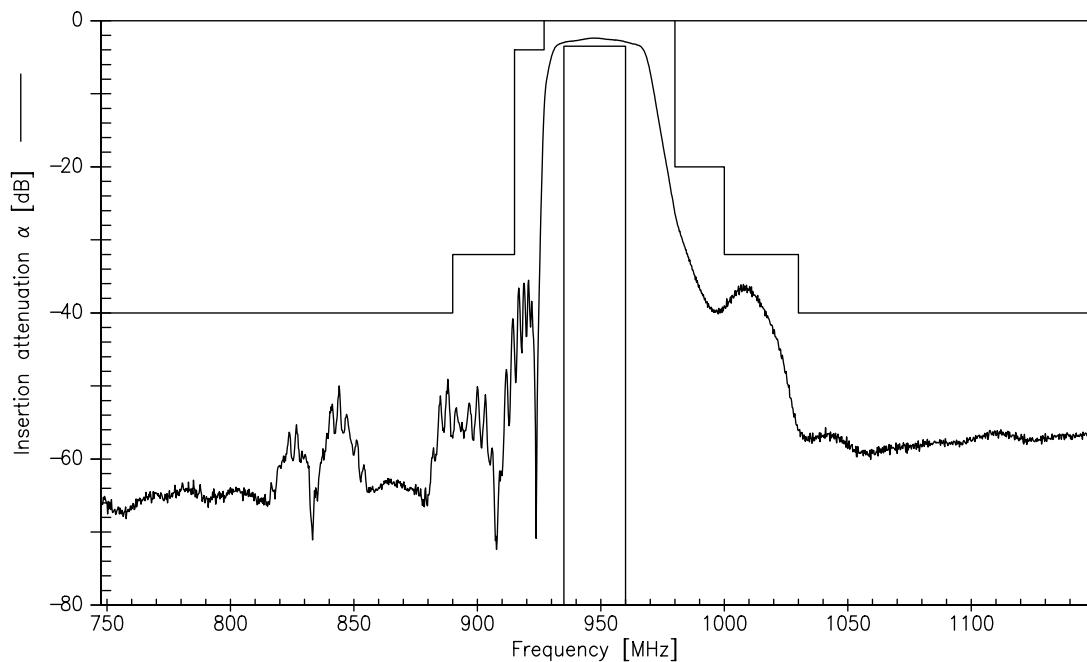
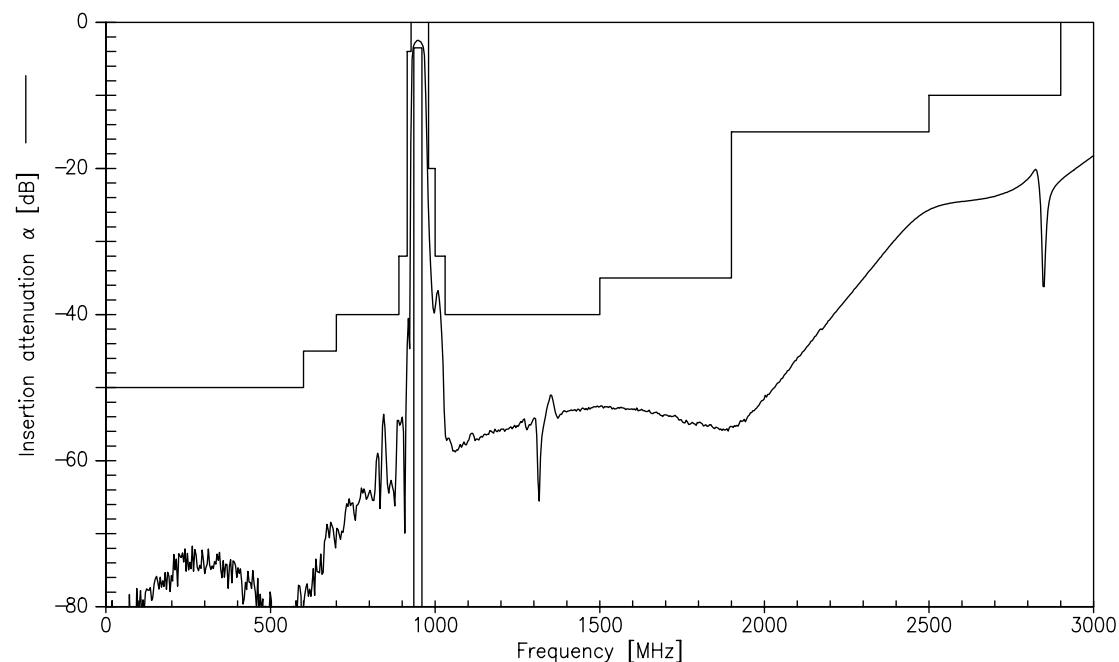
 Terminating load impedance: $Z_L = 50 \Omega$

			min.	typ. @ 25 °C	max.	
Center frequency		f_C	—	947.50	—	MHz
Maximum insertion attenuation		α_{\max}	—	3.1	3.8	dB
935.0 ... 960.0	MHz					
Amplitude ripple (p-p)		$\Delta\alpha$	—	0.8	1.5	dB
935.0 ... 960.0	MHz					
Attenuation		α				
0.0 ... 600.0	MHz		50	65	—	dB
600.0 ... 700.0	MHz		45	60	—	dB
700.0 ... 890.0	MHz		40	50	—	dB
890.0 ... 915.0	MHz		32	40	—	dB
915.0 ... 927.0	MHz		4	12	—	dB
980.0 ... 1000.0	MHz		20	24	—	dB
1000.0 ... 1030.0	MHz		32	36	—	dB
1030.0 ... 1500.0	MHz		40	50	—	dB
1500.0 ... 1900.0	MHz		35	48	—	dB
1900.0 ... 2500.0	MHz		15	24	—	dB
2500.0 ... 2900.0	MHz		10	18	—	dB

**SAW Components****B4684****SAW Rx Filter****947.50 MHz****Data Sheet****Maximum ratings**

Operable temperature range	T	-10 / +75	°C	
Storage temperature range	T _{stg}	-40 / +85	°C	
DC voltage	V _{DC}	0	V	
Source power	P _s	10	dBm	source impedance 50 Ω

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Transfer function (narrowband)

Transfer function (wideband)


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**References**

Type	B4684
Ordering code	B39951B4684Z610
Marking and package	C61157-A7-A41
Packaging	F61074-V8030-Z000
Date codes	L_1126
S-parameters	B4684_NB.s3p B4684_WB.s3p See file header for port/pin assignment table
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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