



SAW Components

SAW RF low loss filter

Digital radio

Series/type:	B8762
Ordering code:	B39232-B8762-K610
Date:	July 10, 2008
Version:	2.0

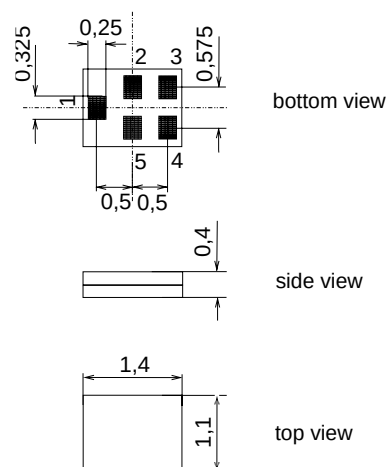
Application

- Low-loss RF filter for digital radio
- Unbalanced to unbalanced operation
- Very low insertion attenuation
- Low amplitude ripple
- Usable passband 12.5 MHz
- No matching network required



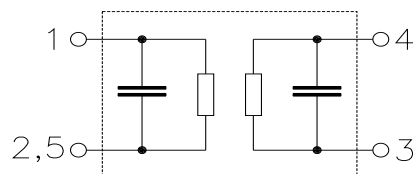
Features

- Package size 1.4 x 1.1 x 0.4 mm³
- Maximum height of 0.45 mm
- Package code QCS5F
- RoHS compatible
- Approximate weight 0.003 g
- Package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- **Electrostatic Sensitive Device (ESD)**



Pin configuration

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





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SAW RF low loss filter

2338.755 MHz

Data sheet



Characteristics

Temperature range for specification: $T = +25\text{ °C}$
Terminating source impedance: $Z_S = 50\ \Omega$
Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ. @ 25 °C	max.	
Nominal frequency	f_N	—	2338.755	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
2332.5 ... 2345.0 MHz		—	1.9	2.5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
2332.5 ... 2345.0 MHz		—	0.2	0.8	dB
Input return loss		10	13	—	dB
Output return loss		10	13	—	dB
Attenuation	α				
88.0 ... 108.0 MHz		50	54	—	dB
880.0 ... 960.0 MHz		35	38	—	dB
1710.0 ... 1990.0 MHz		32	37	—	dB
2305.0 MHz		—	12	—	dB
2310.0 MHz		—	9	—	dB
2315.0 MHz		—	11	—	dB
2320.0 MHz		—	5	—	dB
2450.0 MHz		23	29	—	dB
3060.0 MHz		30	38	—	dB
Group delay ripple (p-p)					
2332.5 ... 2345.0 MHz		—	5	10	ns



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Characteristics

Temperature range for specification:	T	=	-20 °C to +85 °C
Terminating source impedance:	Z _S	=	50 Ω
Terminating load impedance:	Z _L	=	50 Ω

		min.	typ. @ 25 °C	max.	
Nominal frequency	f _N	—	2338.755	—	MHz
Maximum insertion attenuation	α _{max}				
2332.5 ... 2345.0 MHz		—	1.9	3.5	dB
Amplitude ripple (p-p)	Δα				
2332.5 ... 2345.0 MHz		—	0.2	1.6	dB
Input return loss		10	13	—	dB
Output return loss		9	13	—	dB
Attenuation	α				
88.0 ... 108.0 MHz		50	54	—	dB
880.0 ... 960.0 MHz		35	38	—	dB
1710.0 ... 1990.0 MHz		32	37	—	dB
2305.0 MHz		—	12	—	dB
2310.0 MHz		—	9	—	dB
2315.0 MHz		—	11	—	dB
2320.0 MHz		—	5	—	dB
2450.0 MHz		23	29	—	dB
3060.0 MHz		30	38	—	dB
Group delay ripple (p-p)					
2332.5 ... 2345.0 MHz		—	5	15	ns

Maximum ratings

Operable temperature range	T	-30/+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, 1 pulse
Input power at 2332.5 MHz...2345.0 MHz	P _{IN}	10	dBm	source impedance 50 Ω

¹⁾ according to JESD22-A115A (machine model), 1 negative & 1 positive pulse.



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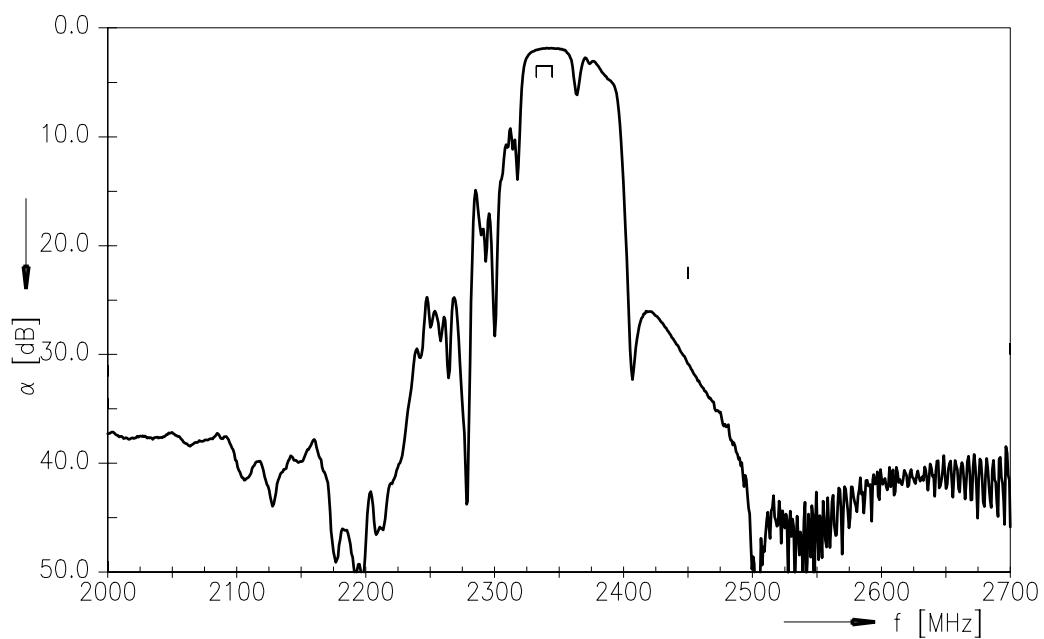
SAW RF low loss filter

2338.755 MHz

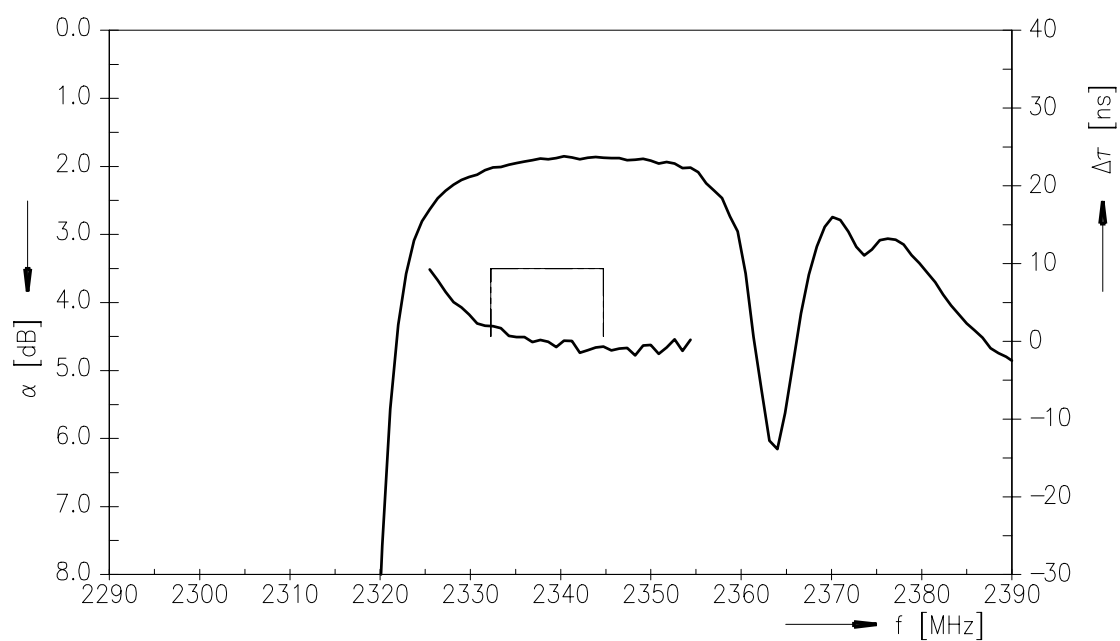
Data sheet



Transfer function



Transfer function (passband)



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



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B8762

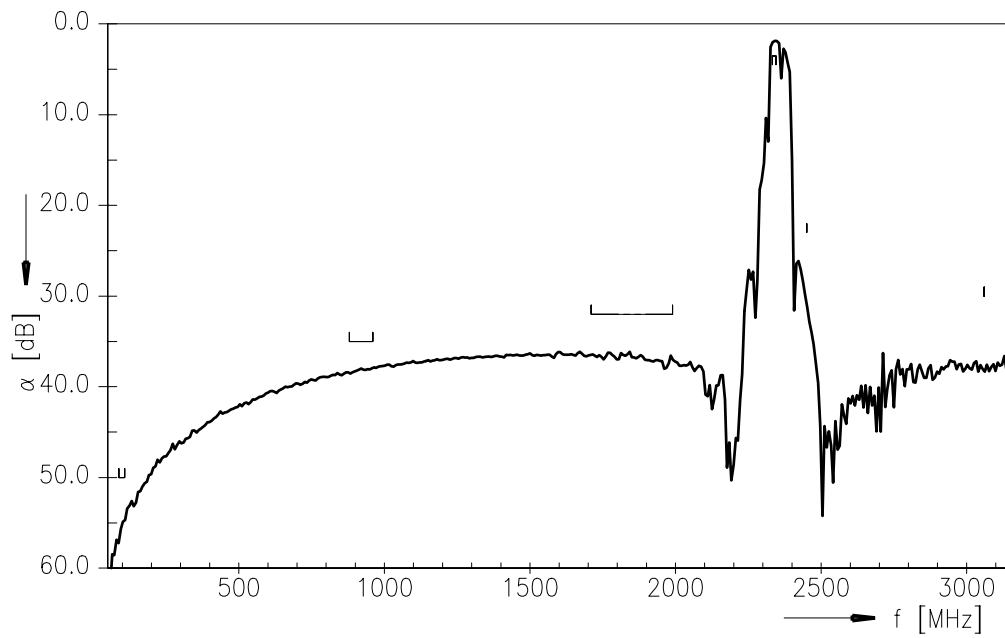
SAW RF low loss filter

2338.755 MHz

Data sheet



Transfer function (wide band)





SAW Components	B8762
SAW RF low loss filter	2338.755 MHz
Data sheet	SMD

References

Type	B8762
Ordering code	B39232-B8762-K610
Marking and package	C61157-A8-A1
Packaging	F61074-V8212-Z000
Date codes	L_1126
S-parameters	B8762_NB.s2p B8762_WB.s2p 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."
Moldability	Before using in overmolding environment, please contact your EPCOS sales office.

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

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



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