



SAW Components

SAW filter

Short range devices

Series/type:	B3512
Ordering code:	B39941-B3512-U410
Date:	November 20, 2007
Version:	2.0



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B3512

SAW filter

942.50 MHz

Data sheet



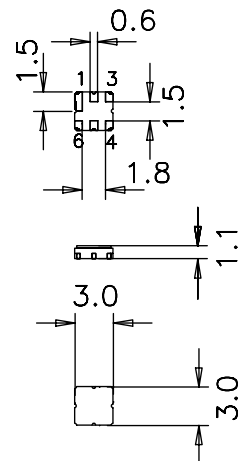
Application

- Low-loss RF filter for remote control receivers
- Usable passband 35 MHz



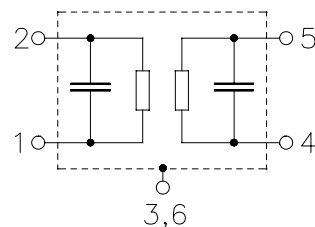
Features

- 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
- Lead free soldering compatible with J - STD20C
- **Electrostatic Sensitive Device (ESD)**



Pin configuration

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





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Characteristics

Temperature range for specification: $T = -40\text{ °C to }+85\text{ °C}$
Terminating source impedance: $Z_S = 50\ \Omega$
Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	942.50	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
925.00 ... 960.00 MHz		—	3.8	5.0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
925.00 ... 960.00 MHz		—	2.0	3.4	dB
VSWR					
Input 925.00 ... 960.00 MHz			2.3	2.5	
Output 925.00 ... 960.00 MHz			2.3	2.5	
Attenuation	α				
0.00 ... 800.00 MHz		50	60	—	dB
800.00 ... 880.00 MHz		40	52	—	dB
880.00 ... 905.00 MHz		30	38	—	dB
905.00 ... 915.00 MHz		15	28	—	dB
980.00 ... 982.00 MHz		20	22	—	dB
982.00 ... 1005.00 MHz		23	26	—	dB
1005.00 ... 1025.00 MHz		30	42	—	dB
1025.00 ... 1760.00 MHz		40	50	—	dB
1760.00 ... 2500.00 MHz		30	40	—	dB
2500.00 ... 3120.00 MHz		20	27	—	dB
3120.00 ... 4000.00 MHz		18	25	—	dB
4000.00 ... 6000.00 MHz		—	8	—	dB

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**Maximum ratings**

Operable temperature range	T	-45/+125	°C	machine model, 10 pulses source and load impedance 50 Ω continuous wave, 85 °C
Storage temperature range	T _{stg}	-45/+125	°C	
DC voltage	V _{DC}	3	V	
ESD voltage	V _{ESD}	100 ¹⁾	V	
Input power max.				
925.00 ... 960.00 MHz	P _{IN}	15	dBm	

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



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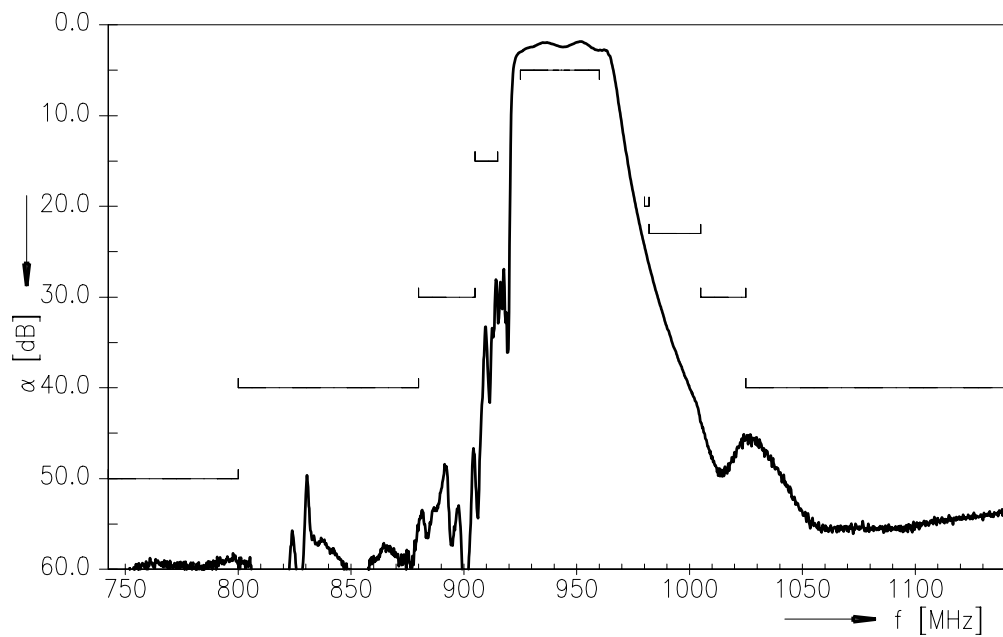
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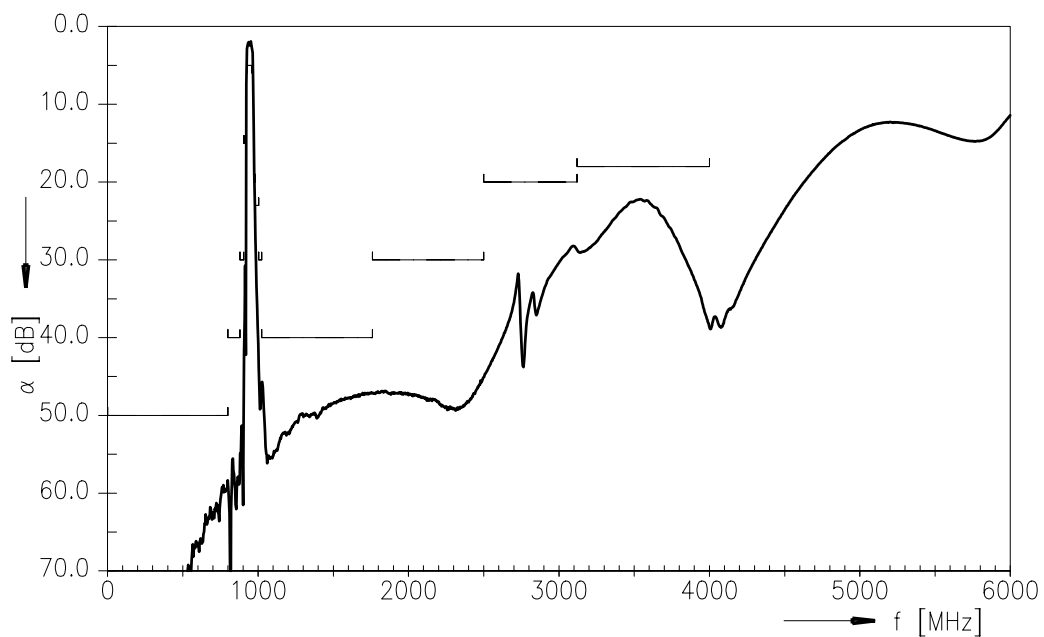
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Transfer function



Transfer function (wideband)



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

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Data sheet

**References**

Type	B3512
Ordering code	B39941-B3512-U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B3512_NB.s2p B3512_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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Surface Acoustic Wave Components Division

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