



## **SAW Components**

### **SAW filter**

Short range devices

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



SAW Components

B3512

SAW filter

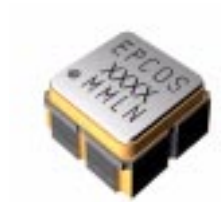
942.50 MHz

Data sheet

**SMD**

### Application

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



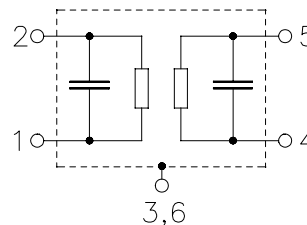
### Features

- Package size 3.0 x 3.0 x 1.1 mm<sup>3</sup>
- 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



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



Data sheet



**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.	
<b>Center frequency</b>	$f_C$	—	942.50	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{max}$	—	3.8	5.0	dB
925.00 ... 960.00 MHz					
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$	—	2.0	3.4	
925.00 ... 960.00 MHz					
<b>VSWR</b>					
Input	925.00 ... 960.00 MHz		2.3	2.5	
Output	925.00 ... 960.00 MHz		2.3	2.5	
<b>Attenuation</b>	$\alpha$				
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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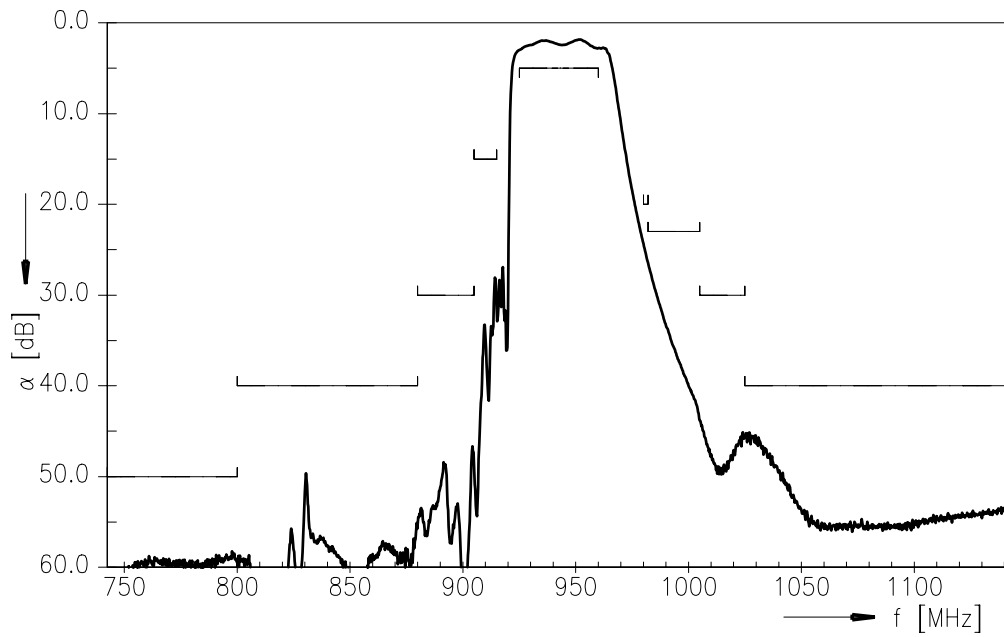
### Maximum ratings

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

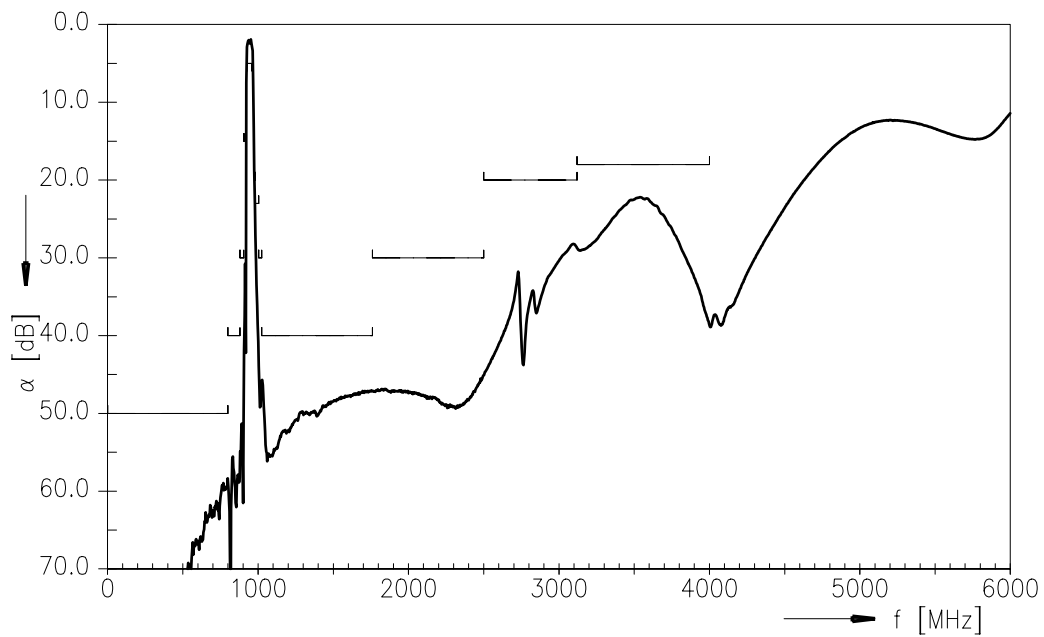
<sup>1)</sup> acc. to JESD22-A115A (machine model), 10 negative & 10 positive pulses.



Transfer function



Transfer function (wideband)





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Data sheet



## References

<b>Type</b>	B3512
<b>Ordering code</b>	B39941-B3512-U410
<b>Marking and package</b>	C61157-A7-A67
<b>Packaging</b>	F61074-V8168-Z000
<b>Date codes</b>	L_1126
<b>S-parameters</b>	B3512_NB.s2p B3512_WB.s2p
<b>Soldering profile</b>	S_6001
<b>RoHS compatible</b>	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."

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