SAW Components

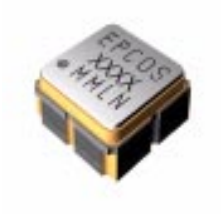
SAW filter

Short range devices

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

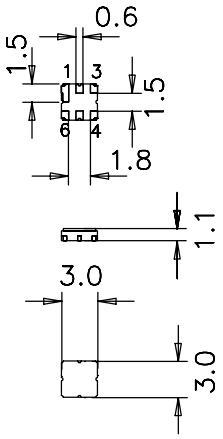
Application

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



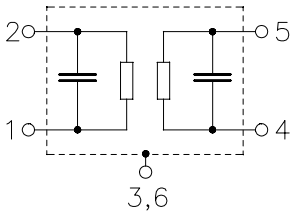
Features

- Package size 3.0 x 3.0 x 1.1 mm³
- Package code DCC6C
- RoHS compatible
- Approximate weight 0.037 g
- Package for **S**urface **M**ount **T**echnology (**SMT**)
- Ni, gold-plated terminals
- Lead free soldering compatible with J - STD20C
- **E**lectrostactic **S**ensitive **D**evice (**ESD**)



Pin configuration

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



Data sheet SMD

Characteristics

Temperature range for specification: T = –40 ˚C to +85 ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

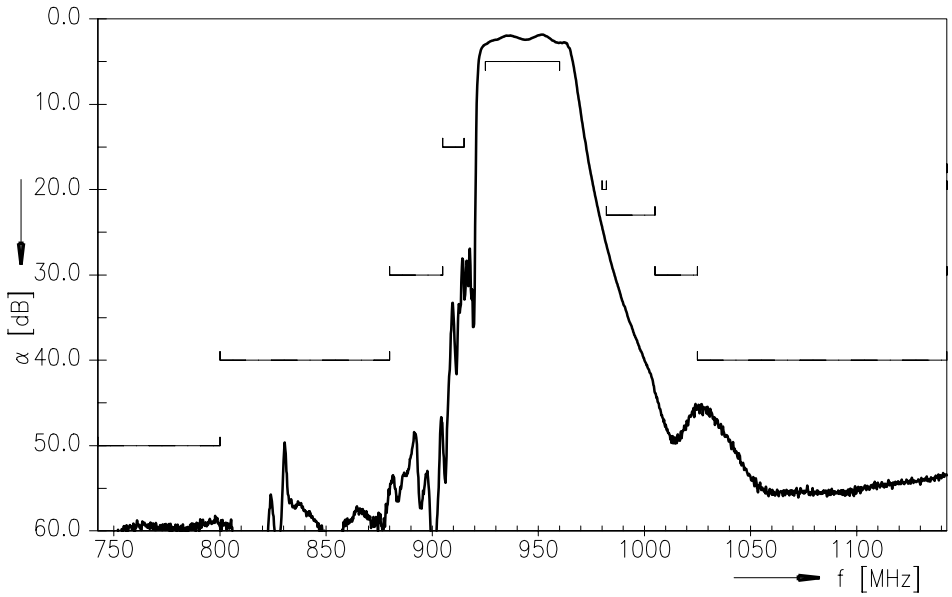
		min.	typ. @ 25 ˚C	max.	
Center frequency	f_C	—	942.50	—	MHz
Maximum insertion attenuation	α_{max}				
925.00 ... 960.00 MHz		—	3.8	5.0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
925.00 ... 960.00 MHz		—	2.0	3.4	dB
VSWR					
Input 925.00 ... 960.00 MHz			2.3	2.5	
Output 925.00 ... 960.00 MHz			2.3	2.5	
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

Maximum ratings

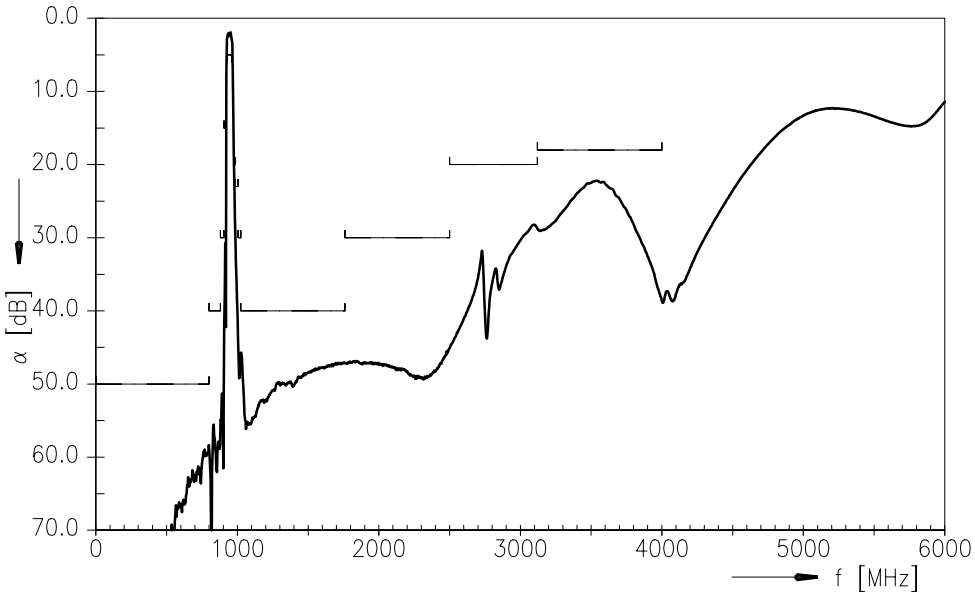
Operable temperature range	T	–45/+125	˚C	
Storage temperature range	T_{stg}	–45/+125	˚C	
DC voltage	V_{DC}	3	V	
ESD voltage	V_{ESD}	100[1)]	V	machine model, 10 pulses
Input power max.				source and load impedance 50 Ω
925.00 ... 960.00 MHz	P_{IN}	15	dBm	continuous wave, 85 ˚C

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

Transfer function



Transfer function (wideband)



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."

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