



SAW Components

SAW RF filter

Basestation

Series/type:	B5124
Ordering code:	B39741B5124U410
Date:	November 17, 2009
Version:	2.0



SAW Components

B5124

SAW RF filter

737.0 MHz

Data Sheet



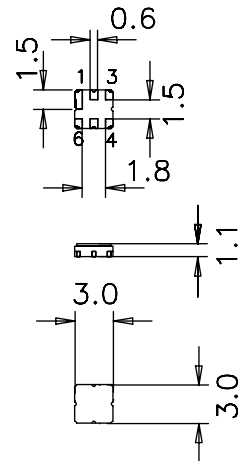
Application

- Low-loss RF filter for Basestation
- Usable band width 20 MHz



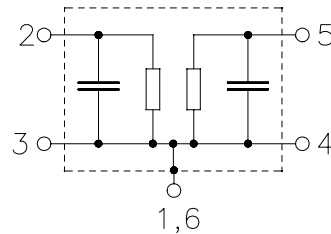
Features

- Package size 3.0 x3.0 x 1.10 mm³
- Package code DCC6C
- RoHS compatible
- Approximate weight 0.037 g
- Ceramic package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals
- **Electrostatic Sensitive Device (ESD)**
- Filter surface passivated



Pin configuration

- 2 Input
- 5 Output
- 1, 3, 4, 6 To be grounded





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Characteristics

Temperature range for specification: $T = -35\text{ °C to }+85\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ. @ 25 °C	max.	
Nominal frequency	f_N	—	737.0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
$f_N \pm 10\text{ MHz}$		—	1.9	3.0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
$f_N \pm 10\text{ MHz}$		—	0.7	1.5	dB
Return loss (input / output)					
$f_N \pm 10\text{ MHz}$		9	11	—	
Absolute attenuation	α				
0.3 ... 697.0 MHz		35	45	—	dB
697.0 ... 714.0 MHz		30	37	—	dB
714.0 ... 717.0 MHz		20	25	—	dB
757.0 ... 762.0 MHz		10	20	—	dB
762.0 ... 866.0 MHz		25	28	—	dB
866.0 ... 967.0 MHz		30	45	—	dB
967.0 ... 1934.0 MHz		25	35	—	dB
1934.0 ... 3000.0 MHz		15	30	—	dB
Temperature coefficient of frequency	TC_f	—	-36	—	ppm/°K

Maximum ratings

Operable temperature range	T	-40/+85	°C	machine model, 1 pulse
Storage temperature range	T_{stg}	-40/+85	°C	
DC voltage	V_{DC}	0	V	
ESD voltage	V_{ESD}	50 ¹⁾	V	
Input power	P_{IN}	10	dBm	

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



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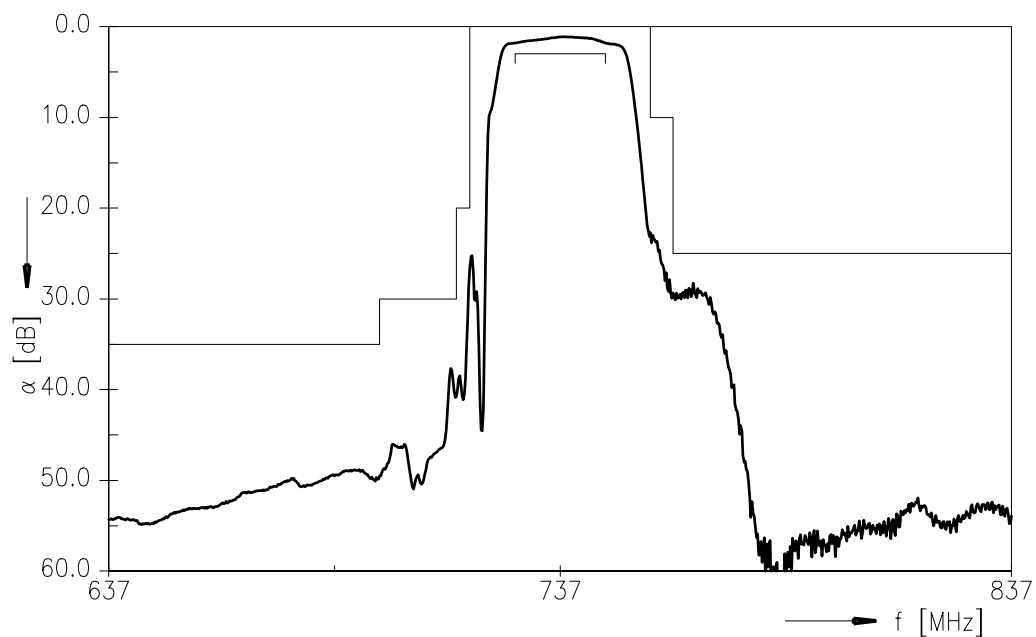
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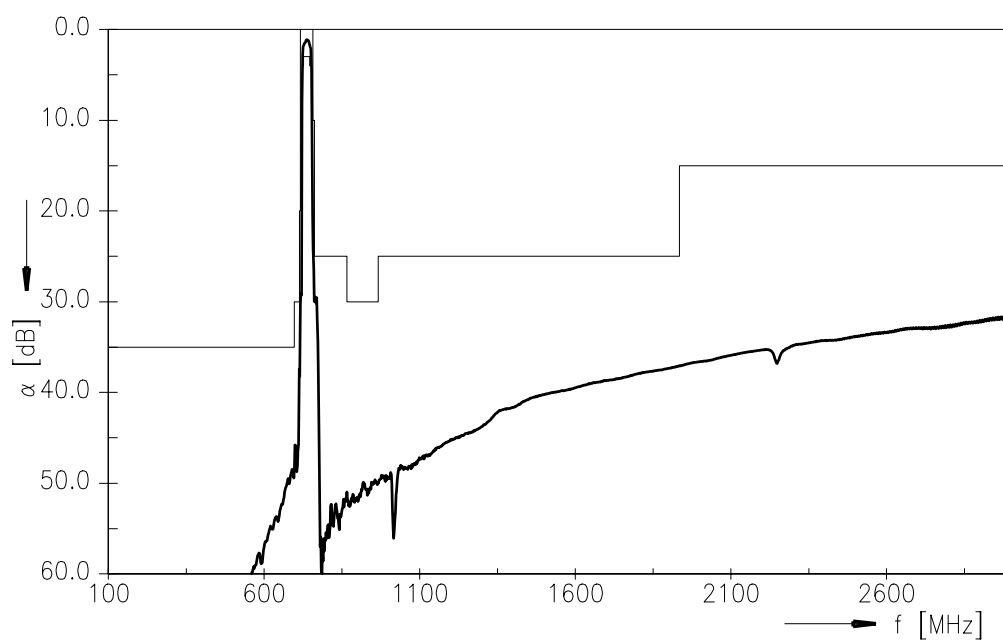
Data Sheet

SMD

Transfer function (narrow band)



Transfer function (wide band)



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



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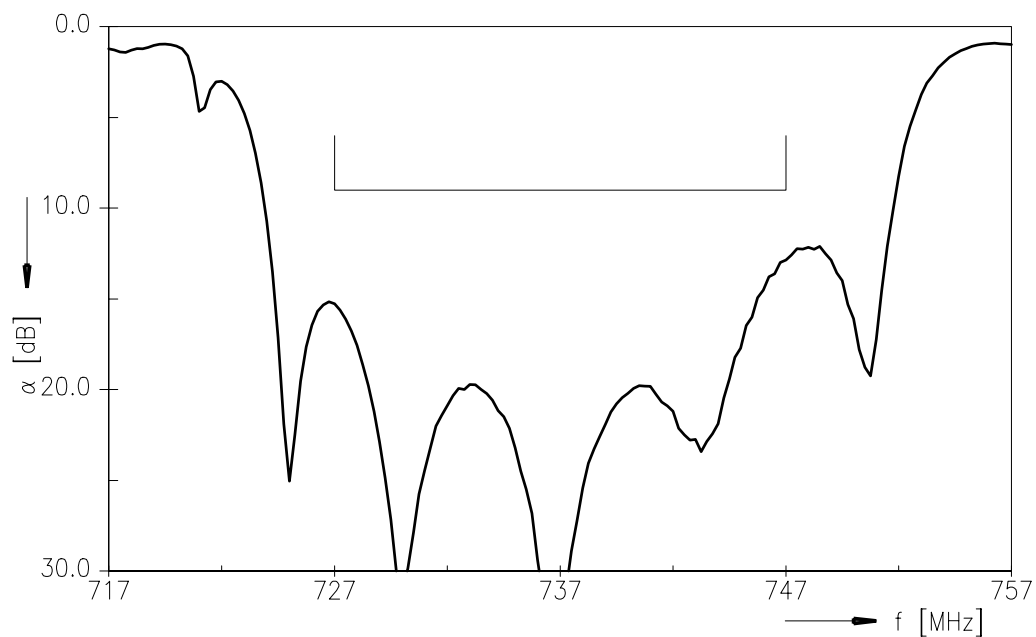
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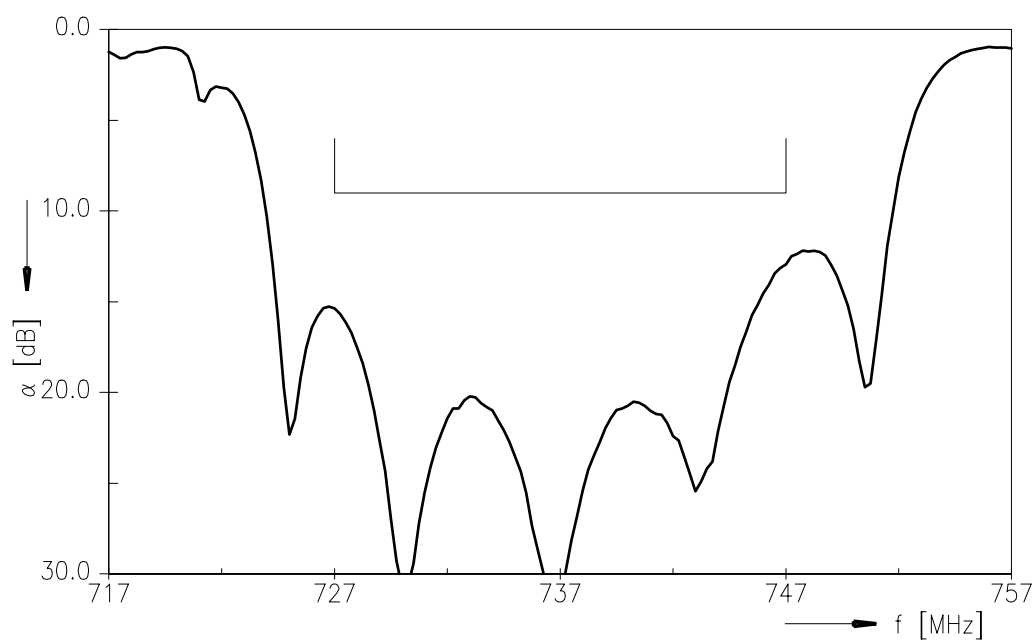
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SMD

Input return loss



Output return loss



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**References**

Type	B5124
Ordering code	B39741B5124U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B5124_NB.s2p B5124_WB.s2p See file header for port/pin assignment
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 maxi- mum 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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