



SAW Components

SAW RF filter

Basestation

Series/type:	B5113
Ordering code:	B39791-B5113-U410
Date:	February 23, 2009
Version:	2.0



SAW Components

B5113

SAW RF filter

787.0 MHz

Data Sheet



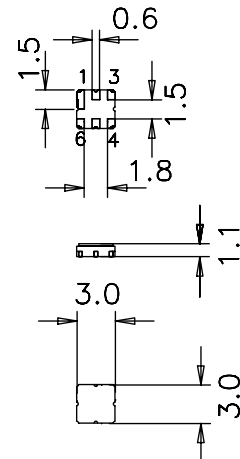
Application

- Low-loss RF filter for Basestation
- Usable band width 22 MHz
- 50 Ω single ended



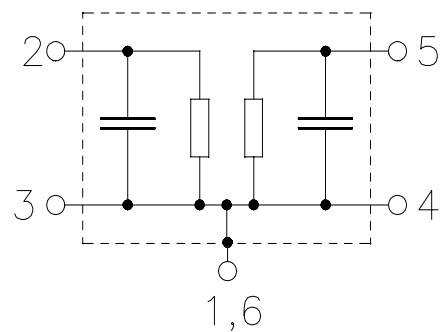
Features

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

		min.	typ. @ 25 °C	max.	
Nominal frequency	f_N	—	787.0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$	—	2.1	3.0	dB
$f_N \pm 11\text{ MHz}$					
Amplitude ripple (p-p)	$\Delta\alpha$	—	1.0	2.0	dB
$f_N \pm 11\text{ MHz}$					
Return loss (input / output)		10.0	12.0	—	dB
$f_N \pm 11\text{ MHz}$					
Absolute attenuation	α				
0.3 ... 746.0 MHz		35	44	—	dB
746.0 ... 756.0 MHz		32	40	—	dB
756.0 ... 763.0 MHz		20	31	—	dB
763.0 ... 768.0 MHz		15	24	—	dB
860.0 ... 885.0 MHz		35	45	—	dB
885.0 ... 1200.0 MHz		30	43	—	dB
1200.0 ... 2500.0 MHz		20	30	—	dB
2500.0 ... 3500.0 MHz		10	25	—	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 pulses.



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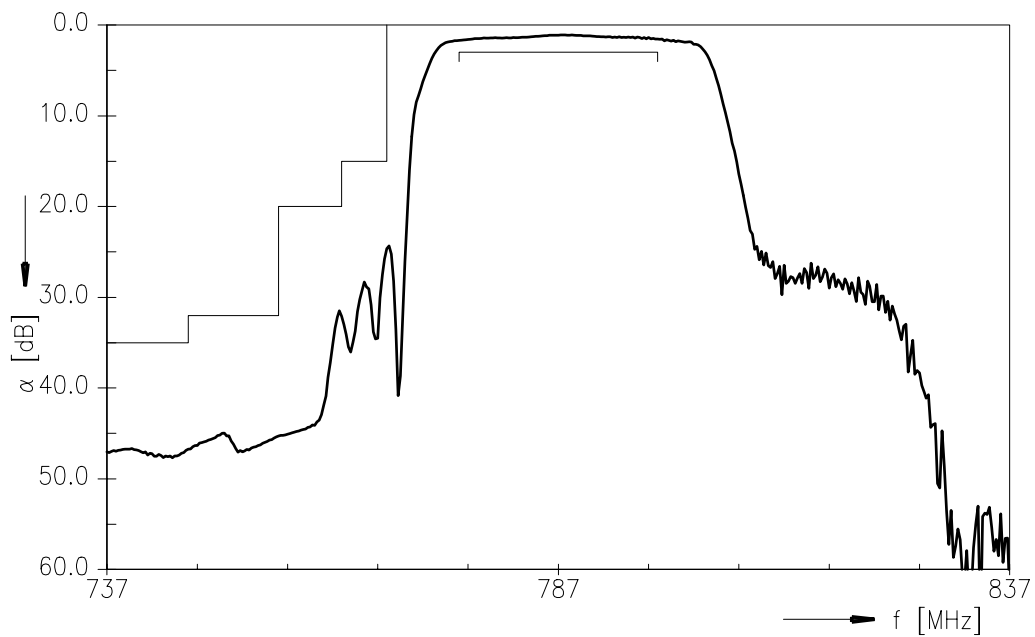
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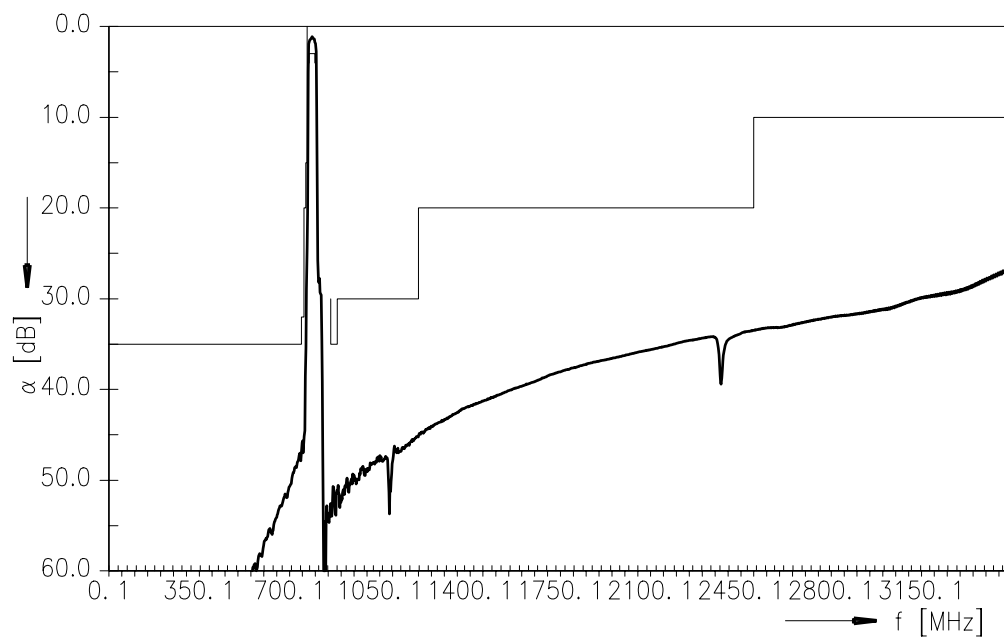
Data Sheet



Transfer function



Transfer function (Wide Band)



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

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**References**

Type	B5113
Ordering code	B39791-B5113-U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B5113_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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Please read *cautions and warnings and important notes* at the end of this document.



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