



SAW Components

SAW RF filter

Basestation

Series/type:	B5117
Ordering code:	B39771B5117U410
Date:	January 05, 2009
Version:	1.1

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SAW Components	B5117
SAW RF filter	766.5 MHz

Preliminary Data



Revision History: Changes compared to previous iteration issue

ISSUE	ORIGINATOR	DETAIL SPEC CHANGES	DATE
0.1	JA.Damy	initial release	21.07.2008
1.0	JA.Damy	release after first measurement	23.09.2008
1.1	G.Jameux	B-number and ordering code introduced	05.01.2009

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



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SMD

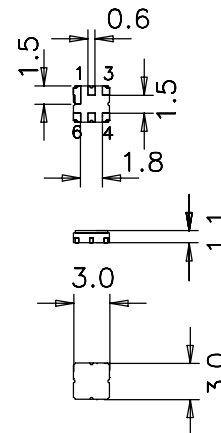
Application

- Low-loss RF filter for Basestation
- Usable band width 17 MHz



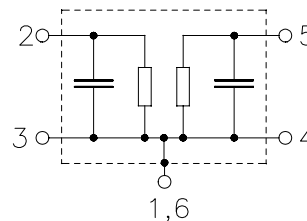
Features

- 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: $T = -25\text{ °C to }+85\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ. @ 25 °C	max.	
Nominal frequency	f_N	—	766.5	—	MHz
Maximum insertion attenuation	α_{max}				
	$f_N \pm 8.5\text{ MHz}$	—	2.0	3.5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
	$f_N \pm 8.5\text{ MHz}$	—	0.75	1.5	dB
Return loss (input / output)					
	$f_N \pm 8.5\text{ MHz}$	9	11	—	
Absolute attenuation	α				
	788.0 ... 805.0 MHz	10	18	—	dB
	806.0 ... 849.0 MHz	20	35	—	dB
Temperature coefficient of frequency	TC_f	—	-36	—	ppm/K

Maximum ratings

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

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



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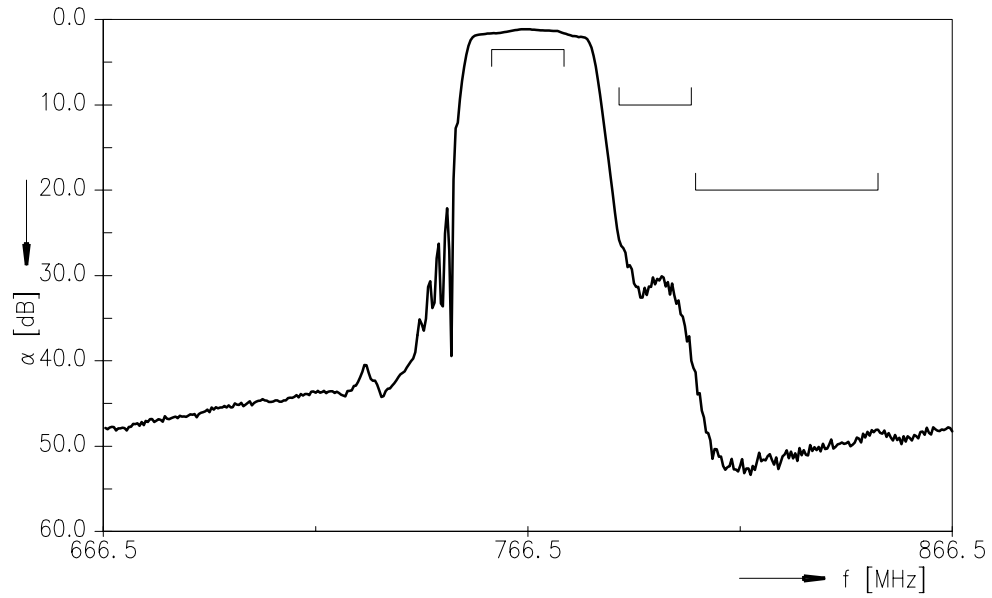
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Transfer function



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References

Type	B5117
Ordering code	B39771B5117U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	
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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