



SAW Components

SAW filter

RF Base Station

Series/type:	B5118
Ordering code:	B39801B5118U410
Date:	January 12, 2010
Version:	2.0

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SAW Components

B5118

SAW filter

796.50 MHz

Datasheet

SMD

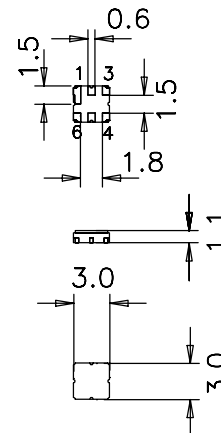
Application

- RF filter for Base station
- Unbalanced to Unbalanced operation
- Low amplitude ripple
- Usable passband 17 MHz



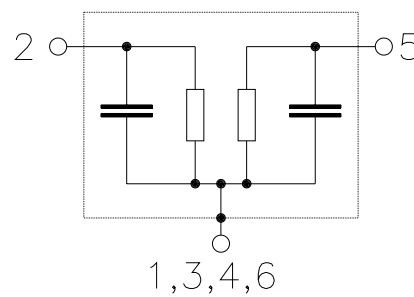
Features

- Package size 3.0 x 3.0 x 1.1 mm³
- Package code DCC6C
- RoHS compatible
- Approximate weight 0.037 g
- Package for Surface Mount Technology (SMT)
- Ni, gold-plated terminals
- Electrostatic Sensitive Device (ESD)



Pin configuration

- 2 Input
- 5 Output
- 1,3,4,6 Case grounded



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

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Datasheet



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.	
Center frequency	f_C			—	796.5	—	MHz
Maximum insertion attenuation	α_{max}	788.0 ... 805.0	MHz	—	1.8	2.5	dB
Amplitude ripple (p-p)	$\Delta\alpha$	788.0 ... 805.0	MHz	—	0.5	1.2	dB
Return loss		788.0 ... 805.0	MHz	10.0	16.0	—	dB
Attenuation	α	746.0 ... 757.0	MHz	40	48	—	dB
		758.0 ... 775.0	MHz	10	32	—	dB
		851.0 ... 894.0	MHz	40	52	—	dB



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Maximum ratings

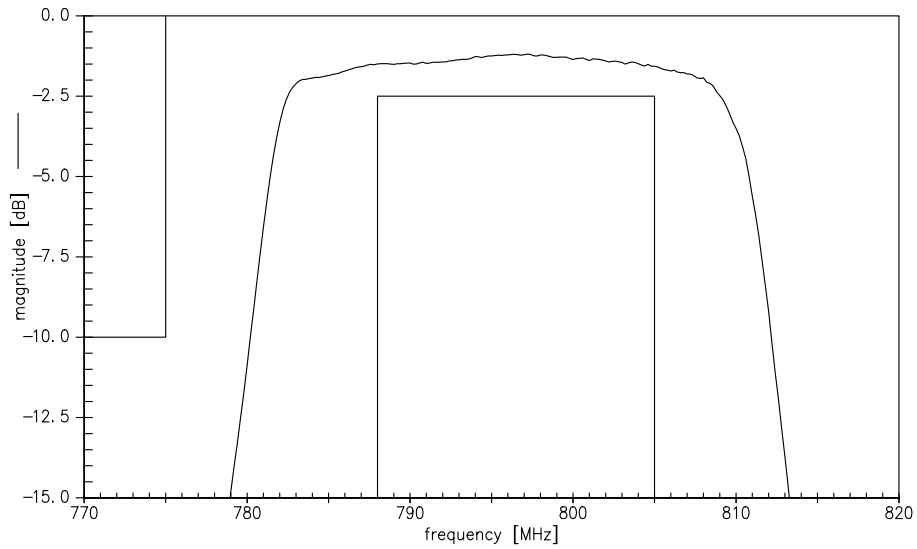
Operable temperature range	T	-40/+85	°C	
Storage temperature range	T _{stg}	-40/+85	°C	
DC voltage	V _{DC}	5	V	
ESD voltage	V _{ESD}	100 ¹⁾	V	machine model, 1 pulse
Input power at 788.0 ... 805.0	P _{IN}	15	dBm	CW

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

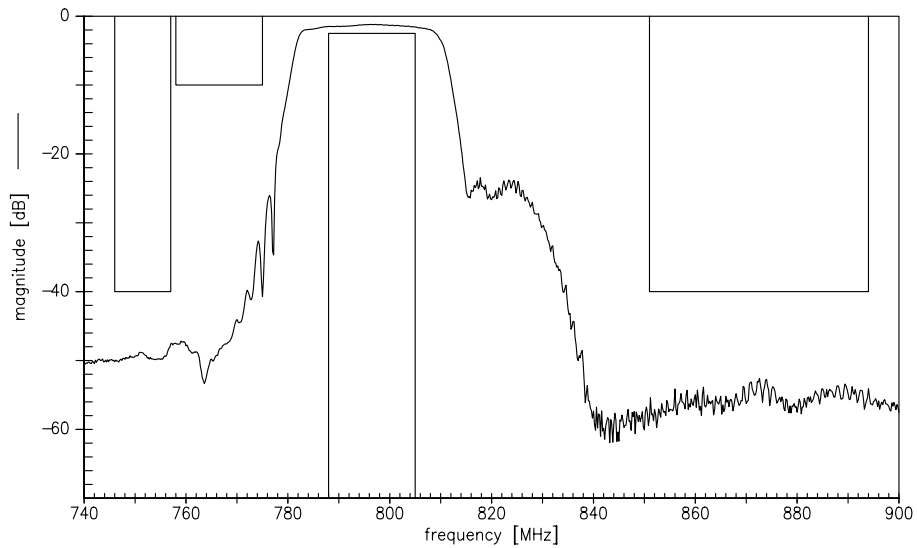
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Transfer function



Transfer function (wideband)



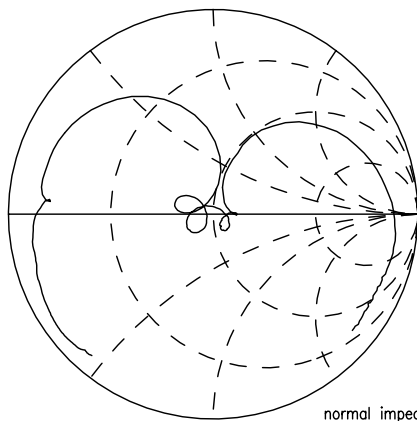
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Datasheet

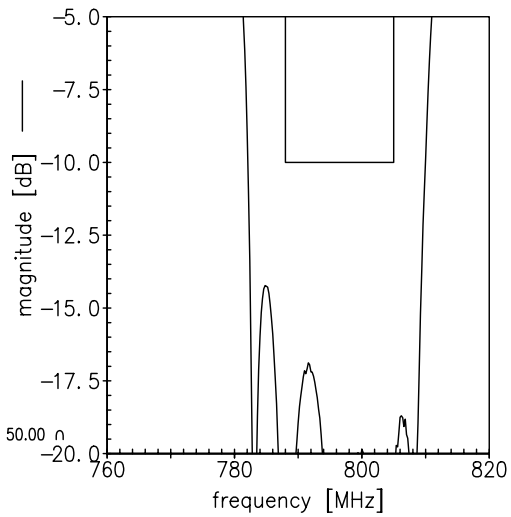


Smith charts

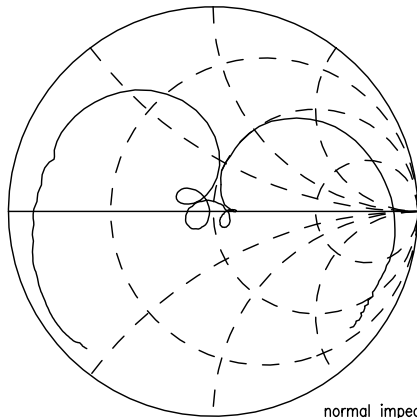
S_{11} function



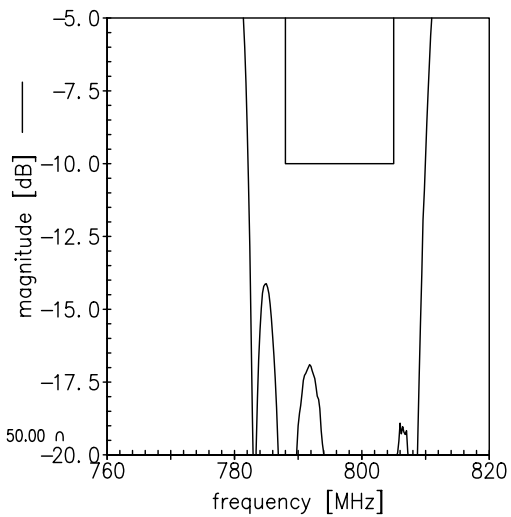
normal impedance: 50.00 Ω



S_{22} function



normal impedance: 50.00 Ω



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References

Type	B5118
Ordering code	B39801B5118U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B5118_NB.s2p B5118_WB.s2p See file header for port/pin assignment table
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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