



SAW Components

SAW filter

GSM 850 TX

Series/type: B4122
Ordering code: B39841B4122U410

Date: April 14, 2010
Version: 2.0



SAW Components

B4122

SAW filter

836.5 MHz

Data sheet



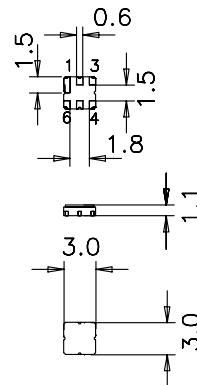
Application

- Low-loss RF filter for AMPS mobile telephone system, transmit path
- Low amplitude ripple
- No matching required for operation at 50Ω
- Usable passband 25 MHz



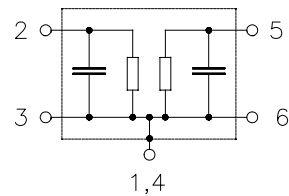
Features

- Package size $3.0 \times 3.0 \times 1.1 \text{ mm}^3$
- 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
- 3 Ground
- 5 Output
- 6 Ground
- 1,4 Case ground



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



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Characteristics

Temperature range for specification: $T = -30$ to $+85^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ. @ 25 °C	max.	
Center frequency	f_c		836.5		MHz
Maximum insertion attenuation	α_{\max}				
	824,0 ... 849,0 MHz	—	2,6	3,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
	824,0 ... 849,0 MHz	—	1,1	1,5	dB
VSWR					
	824,0 ... 849,0 MHz	—	1,92	2,0	dB
Attenuation	α_{abs}				
	0,0 ... 800,0 MHz	30,0	50,0	—	dB
	800,0 ... 894,0 MHz	32,0	34,0	—	dB
	894,0 ... 920,0 MHz	34,0	40,0	—	dB
	920,0 ... 1210,0 MHz	40,0	55,0	—	dB
	1210,0 ... 1500,0 MHz	30,0	50,0	—	dB
	1500,0 ... 2000,0 MHz	25,0	50,0	—	dB
	2000,0 ... 2600,0 MHz	20,0	32,0	—	dB
	2600,0 ... 3000,0 MHz	15,0	28,0	—	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}	3	V	
Source power	P _s	8	dBm	source impedance 50 Ω

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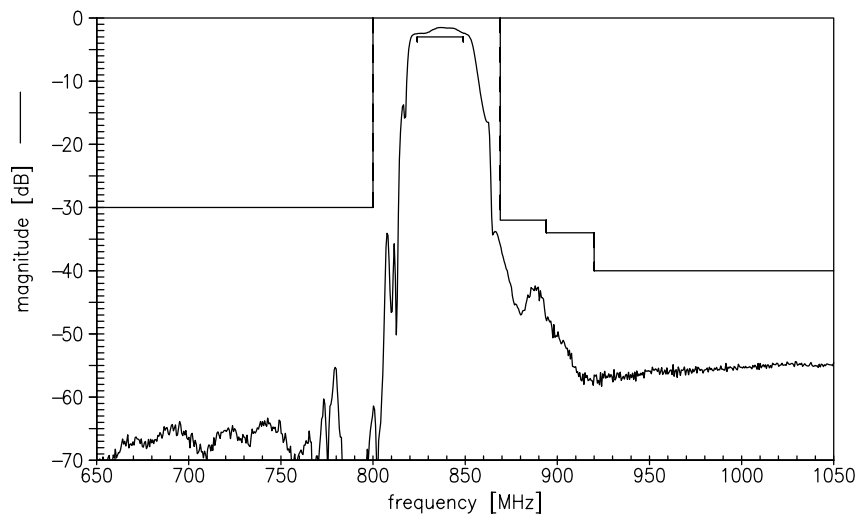
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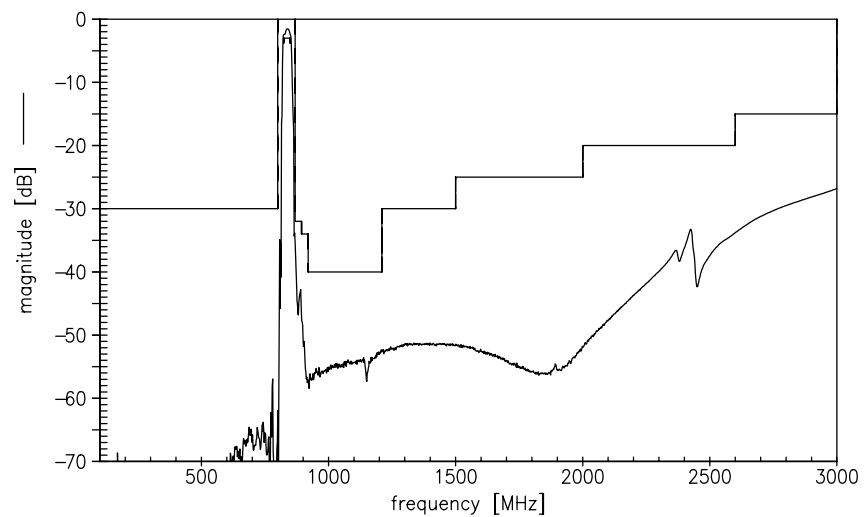
Data sheet



Transfer function



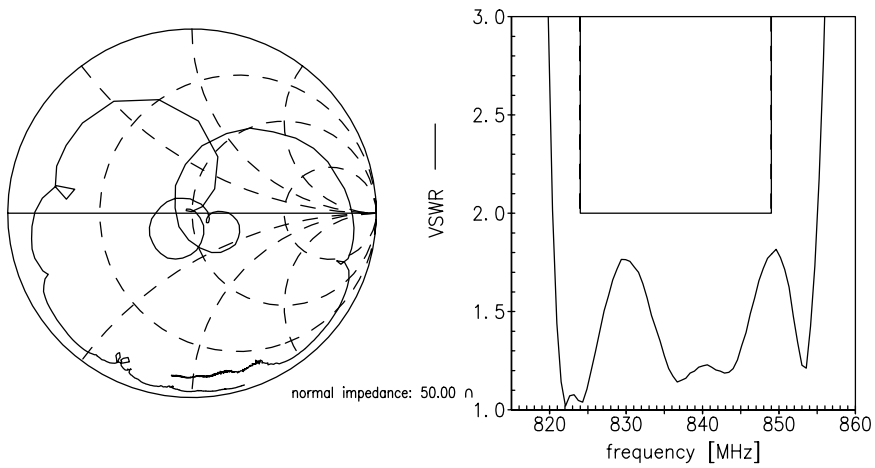
Transfer function (wideband)



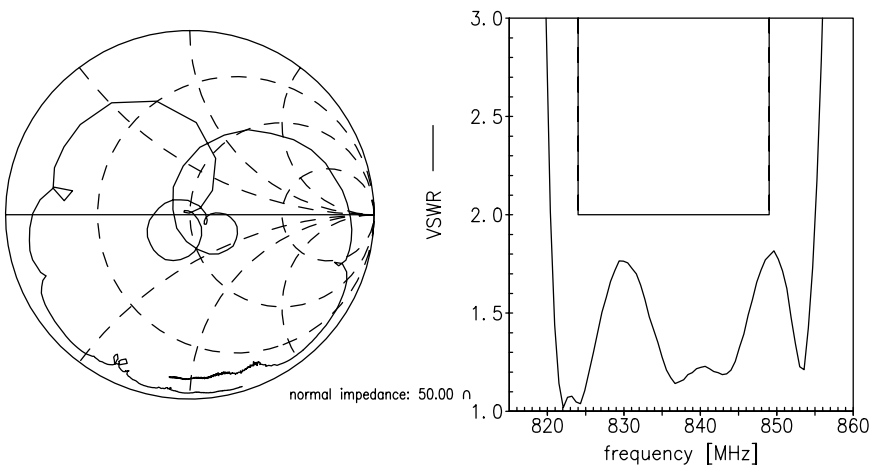
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Reflection function



Reflection function (wideband)





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Data sheet



References

Type	B4122
Ordering code	B39841B4122U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8088-Z000
Date codes	L_1126
S-parameters	B4122_NB.s2p B4122_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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Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: ocean@oceanchips.ru

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А