



SAW Components

SAW filter

GSM 850 TX

Series/type:	B4122
Ordering code:	B39841B4122U410
Date:	April 14, 2010
Version:	2.0



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B4122

SAW filter

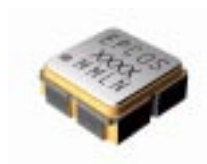
836.5 MHz

Data sheet



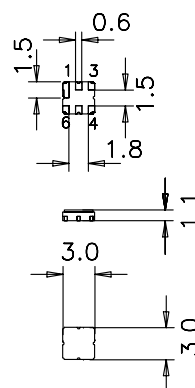
Application

- 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



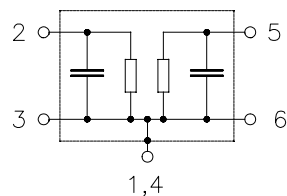
Features

- 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	source impedance 50 Ω
Storage temperature range	T _{stg}	−40/+85	°C	
DC voltage	V _{DC}	3	V	
Source power	P _s	8	dBm	



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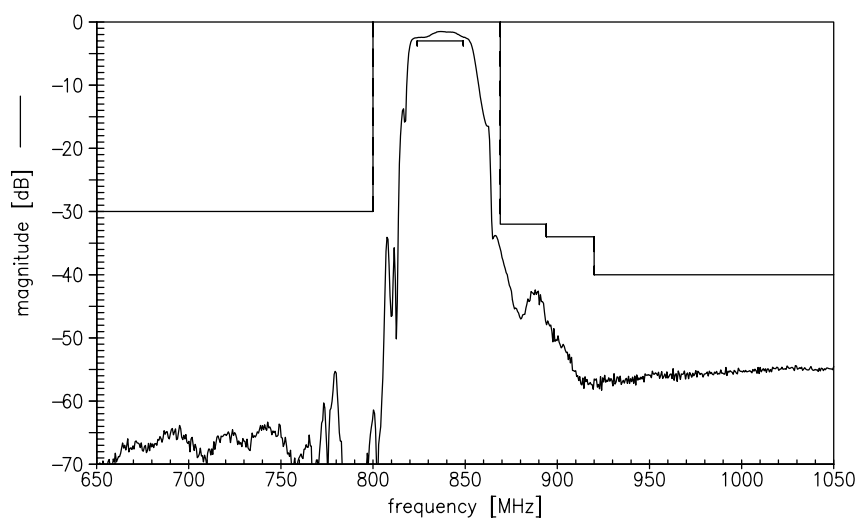
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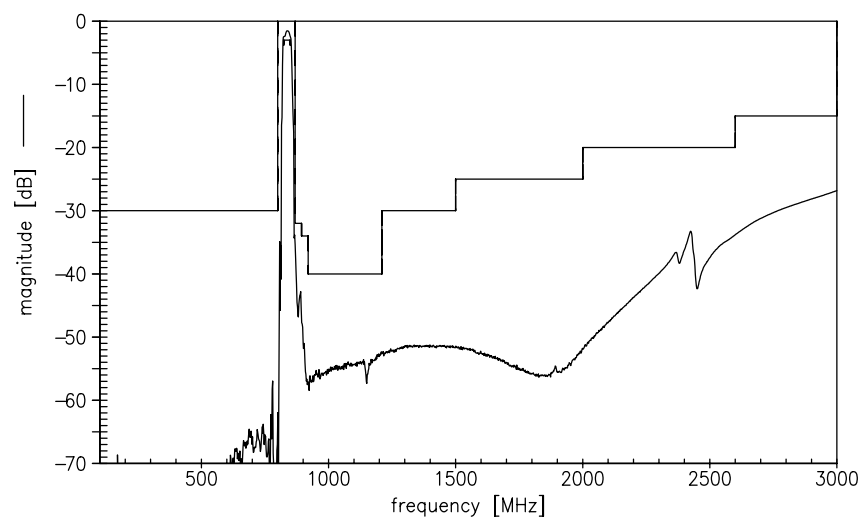
Data sheet



Transfer function



Transfer function (wideband)



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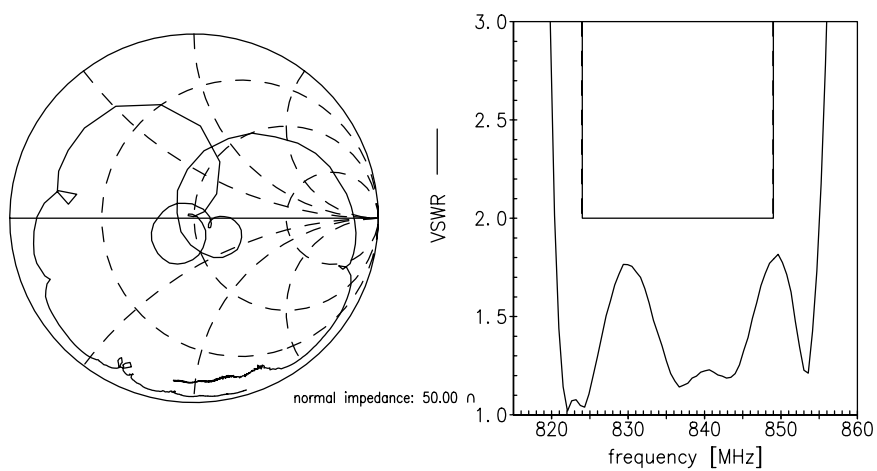
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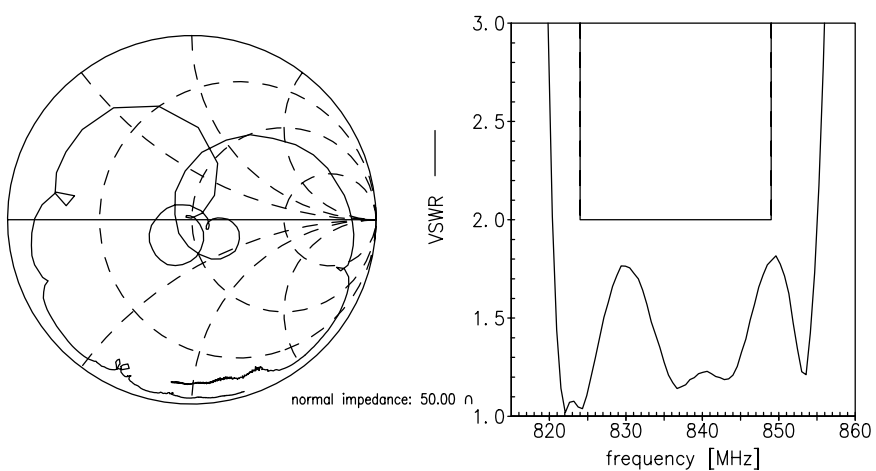
Data sheet



Reflection function



Reflection function (wideband)



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**SAW Components****B4122****SAW filter****836.5 MHz**

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 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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