



SAW Components

SAW filter

CDMA BTS

Series/type:	B4182
Ordering code:	B39182B4182U410
Date:	November 16, 2009
Version:	2.0



SAW Components

B4182

SAW filter

1882.5 MHz

Data sheet



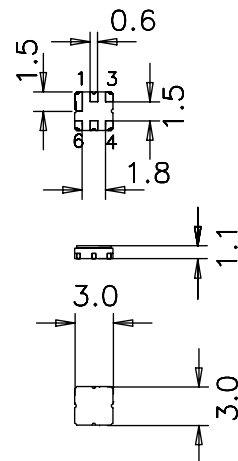
Application

- Low-loss RF filter for Multicarrier Basestation (CD-MA) , receive path
- Low amplitude ripple
- No matching required for operation at 50Ω
- Usable passband 65 MHz



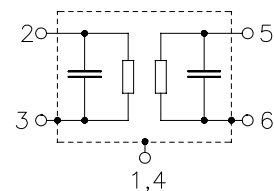
Features

- 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 To be grounded





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Characteristics

Temperature range for specification: $T = 25 \pm 2 \text{ }^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 50 \Omega$

			min.	typ. @ 25 °C	max.	
Center frequency	f_c			1882,5		MHz
Maximum insertion attenuation	α_{\max}					
	1850,0 ... 1915,0 MHz		—	2,5	3,2	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	1850,0 ... 1915,0 MHz		—	0,8	1,4	dB
Return loss						
	1850,0 ... 1915,0 MHz		9,0	10,0	—	dB
Attenuation	α_{abs}					
	800,0 ... 1400,0 MHz		24,0	28,0	—	dB
	1400,0 ... 1745,0 MHz		25,0	28,0	—	dB
	1930,0 ... 1940,0 MHz		5,0	10,0	—	dB
	1940,0 ... 3000,0 MHz		20,0	23,0	—	dB



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Characteristics

Temperature range for specification: $T = 0$ 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			1882,5		MHz
Maximum insertion attenuation	α_{\max}		—	2,9	3,5	
	1850,0 ... 1915,0 MHz					dB
Amplitude ripple (p-p)	$\Delta\alpha$		—	1,1	1,7	
	1850,0 ... 1915,0 MHz					dB
Return loss			9,0	10,0	—	
	1850,0 ... 1915,0 MHz					dB
Attenuation	α_{abs}					
	800,0 ... 1400,0 MHz		24,0	28,0	—	
	1400,0 ... 1746,0 MHz		25,0	28,0	—	dB
	1930,0 ... 1940,0 MHz		5,0	7,0	—	dB
	1940,0 ... 3000,0 MHz		20,0	23,0	—	dB



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Characteristics

Temperature range for specification: $T = -40$ 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			1882,5		MHz
Maximum insertion attenuation	α_{\max}					
	1850,0 ... 1915,0 MHz		—	2,9	4.0	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	1850,0 ... 1915,0 MHz		—	1,1	2.2	dB
Return loss						
	1850,0 ... 1915,0 MHz		9,0	10,0	—	dB
Attenuation	α_{abs}					
	800,0 ... 1400,0 MHz		24,0	28,0	—	
	1400,0 ... 1746,0 MHz		25,0	28,0	—	dB
	1930,0 ... 1940,0 MHz		3,0	7,0	—	dB
	1940,0 ... 3000,0 MHz		20,0	23,0	—	dB

**SAW Components****B4182****SAW filter****1882.5 MHz****Data sheet****Maximum ratings**

Operable temperature range	T	-40/+85	°C	
Storage temperature range	T _{stg}	-40/+85	°C	
DC voltage	V _{DC}	3	V	
ESD voltage	V _{ESD}	50 ¹⁾	V	machine model, 1 pulse
Input power max				
1930.0 ... 1990.0 MHz	P _{IN}	12	dBm	continuous wave, 85 °C
	P _{IN}	15	dBm	continuous wave, 55 °C

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



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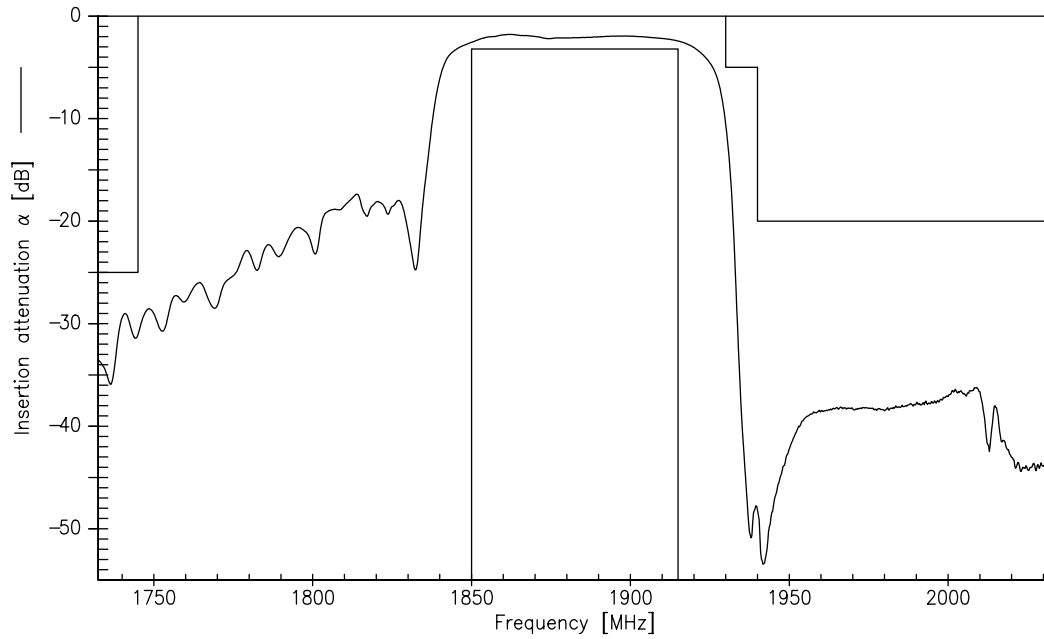
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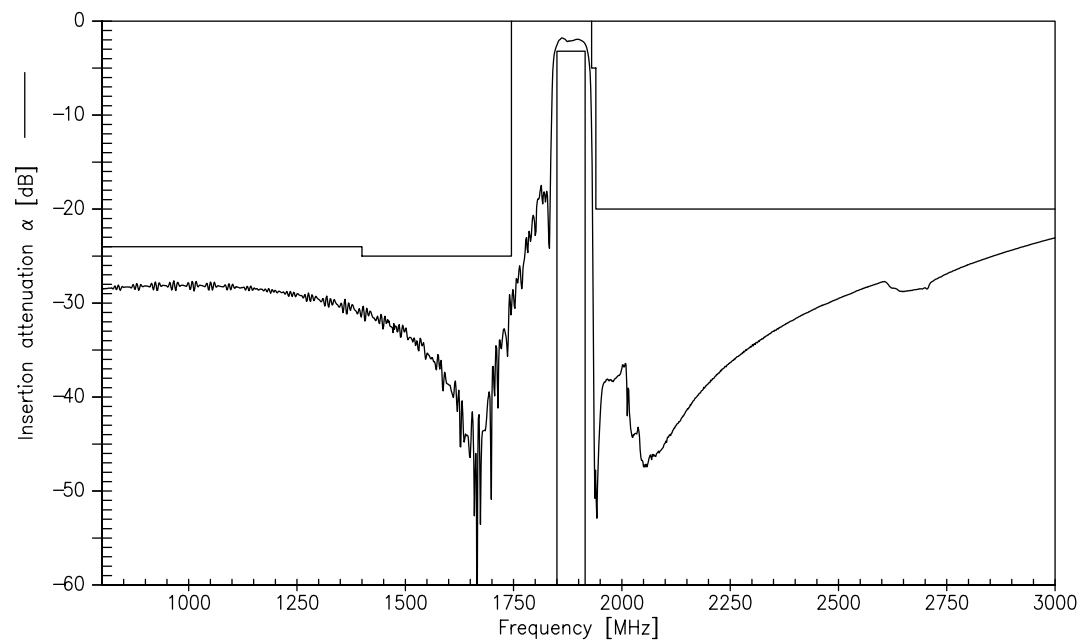
Data sheet



Transfer function



Transfer function (wideband)



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

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Data sheet

**References**

Type	B4182
Ordering code	B39182B4182U410
Marking and package	C61157-A7-A67
Packaging	F61074-V8168-Z000
Date codes	L_1126
S-parameters	B4182_NB.s2p B4182_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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