



SAW Components

SAW RF Filter

TD-SCDMA

Series/Type:	B4184
Ordering code:	B39202-B4184-U410
Date:	Dec 06, 2005
Version:	1



SAW Components

B4184

Low-Loss Dual Band Filter for Mobile Communication

2017.5 MHz

Preliminary Data



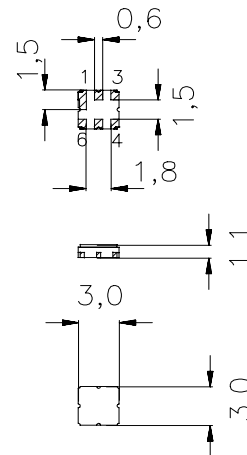
Application

- Low-loss RF filter for mobile telephone TD-SCDMA system
- Low amplitude ripple
- Usable passband 15 MHz
- No matching network required for operation at 50 Ω



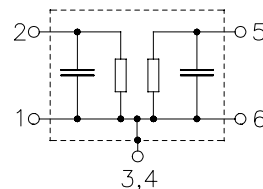
Features

- Package size 3.0 x 3.0 x 1.1 mm³
- RoHS compliant
- Approx. weight 37 mg
- Package for Surface Mount Technology (SMT)
- Ni, gold-plated terminals



Pin configuration

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





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Characteristics

Operating temperature range:	T	=	-35 to +75 °C
Terminating source impedance:	Z_S	=	50 Ω
Terminating load impedance:	Z_L	=	50 Ω

		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	2107.5	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$	—	2.6	3.9 ¹⁾	dB
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.1	1.4 ²⁾	dB
Input VSWR		—	1.5	1.9	
Output VSWR		—	1.8	2.1	
Attenuation	α				
0.0 ... 1840.0 MHz		29	32	—	dB
1840.0 ... 1980.0 MHz		13 ³⁾	19	—	dB
1980.0 ... 1995.0 MHz		3.5 ⁴⁾	9	—	dB
2040.0 ... 2095.0 MHz		3.5 ⁵⁾	11	—	dB
2095.0 ... 2120.0 MHz		17	19	—	dB
2120.0 ... 2160.0 MHz		20	23	—	dB
2160.0 ... 2385.0 MHz		31	33	—	dB
2385.0 ... 2410.0 MHz		32	35	—	dB
2410.0 ... 4000.0 MHz		22	26	—	dB
4000.0 ... 6000.0 MHz		10	15	—	dB

¹⁾ 2.9 dB max. at 25 °C and 3.5 dB max. at -20 .. +55 °C

²⁾ 0.4 dB max. at 25 °C and 1.0 dB max. at -20 .. +55 °C

³⁾ 17 dB min. attenuation at 25 °C and 14 dB min. attenuation at -20 .. +55 °C

⁴⁾ 5 dB min. attenuation at 25 °C and 4 dB min. attenuation at -20 .. +55 °C

⁵⁾ 8 dB min. attenuation at 25 °C and 5 dB min. attenuation at -20 .. +55 °C

**SAW Components****B4184****Low-Loss Dual Band Filter for Mobile Communication****2017.5 MHz****Preliminary Data****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}	50 ¹⁾	V	machine model, 10 pulses
Source power (cw)	P _s	5	dBm	source and load impedance 50 Ω
		15	dBm	0.1% of 5 ms frame

¹⁾ acc. to JESD22-A115A (machine model), 10 negative & 10 positive pulses.



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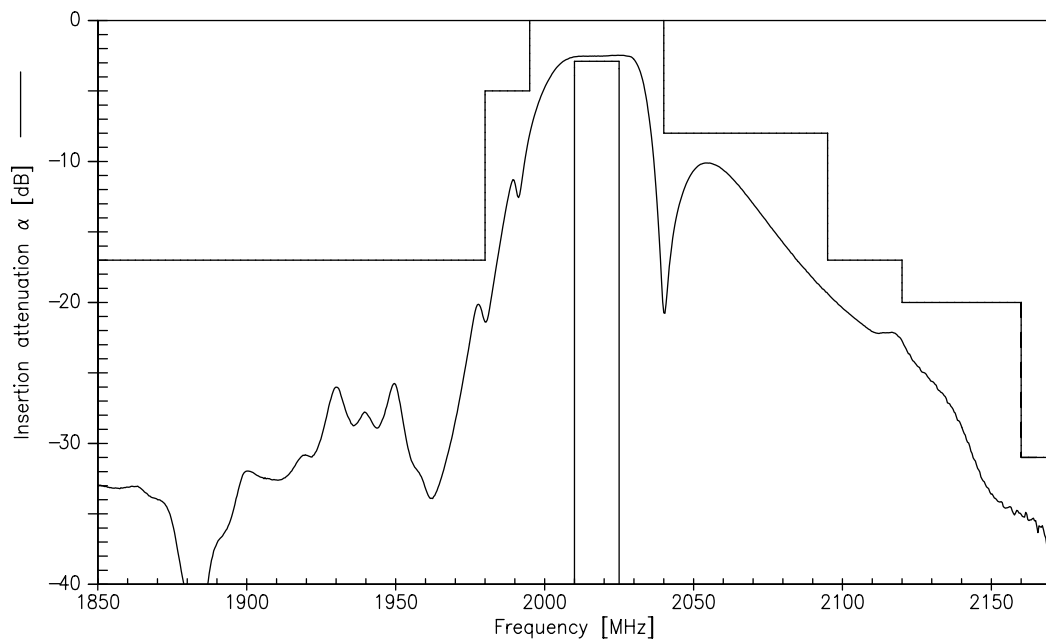
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2017.5 MHz

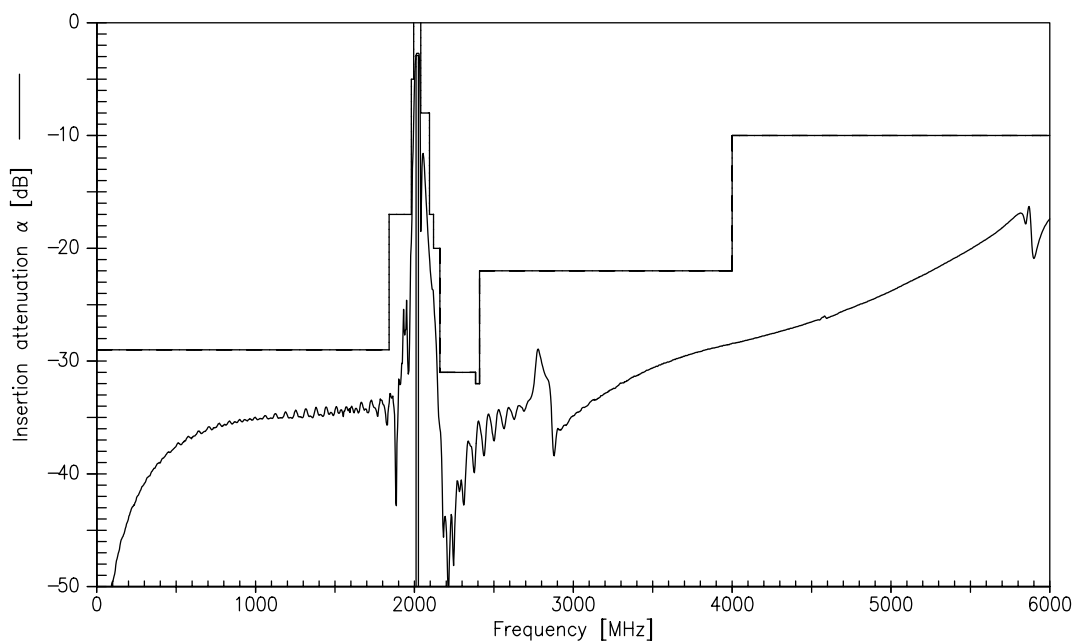
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Transfer function (narrowband)



Transfer function (wideband)



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

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Preliminary Data



Type	B4184	
Ordering code	B39202-B4184-U410	
Marking and Package	C61157-A7-A67	
Packaging	F61074-V8168-Z000	
Date Codes	L_1126	
S-Parameters	B4184_NB.s2p B4184_WB.s2p	
Soldering profile	S_6001	

For further information please contact your local EPCOS sales office or visit our webpage at www.epcos.com.

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