SAW Components

SAW RF Filter

TD-SCDMA

Series/Type: **B4184**
Ordering code: **B39202-B4184-U410**

Date: Dec 06, 2005
Version: 1

Preliminary Data

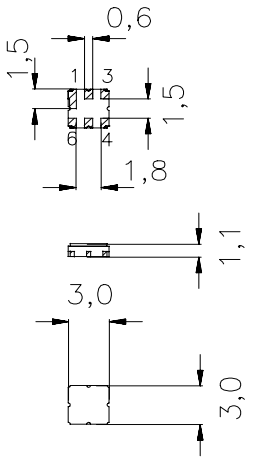
SMD

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

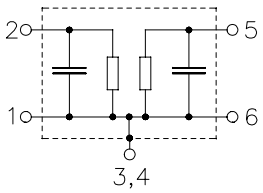
Features

- Package size 3.0 x 3.0 x 1.1 mm³
- RoHS compliant
- Approx. weight 37 mg
- Package for **S**urface **M**ount **T**echnology (**SMT**)
- Ni, gold-plated terminals



Pin configuration

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



Preliminary Data

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	α_{max}				
2010.0 ... 2025.0 MHz		—	2.6	3.9 [1]	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
2010.0 ... 2025.0 MHz		—	0.1	1.4 [2]	dB
Input VSWR					
2010.0 ... 2025.0 MHz		—	1.5	1.9	
Output VSWR					
2010.0 ... 2025.0 MHz		—	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

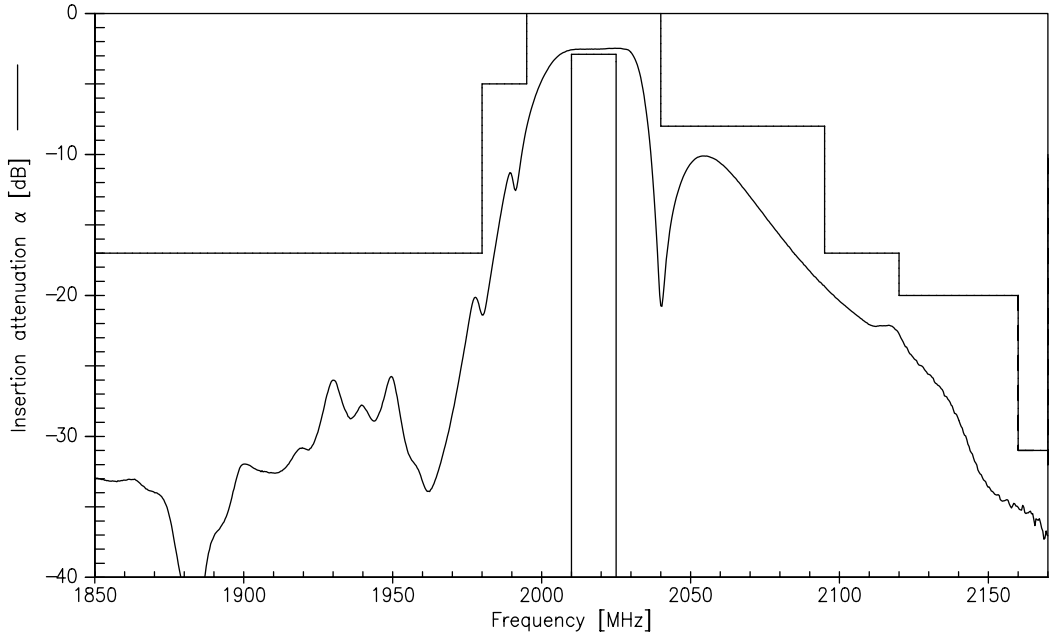
[1] 2.9 dB max. at 25 ˚C and 3.5 dB max. at -20 .. +55 ˚C
[2] 0.4 dB max. at 25 ˚C and 1.0 dB max. at -20 .. +55 ˚C
[3] 17 dB min. attenuation at 25 ˚C and 14 dB min. attenuation at -20 .. +55 ˚C
[4] 5 dB min. attenuation at 25 ˚C and 4 dB min. attenuation at -20 .. +55 ˚C
[5] 8 dB min. attenuation at 25 ˚C and 5 dB min. attenuation at -20 .. +55 ˚C

Maximum ratings

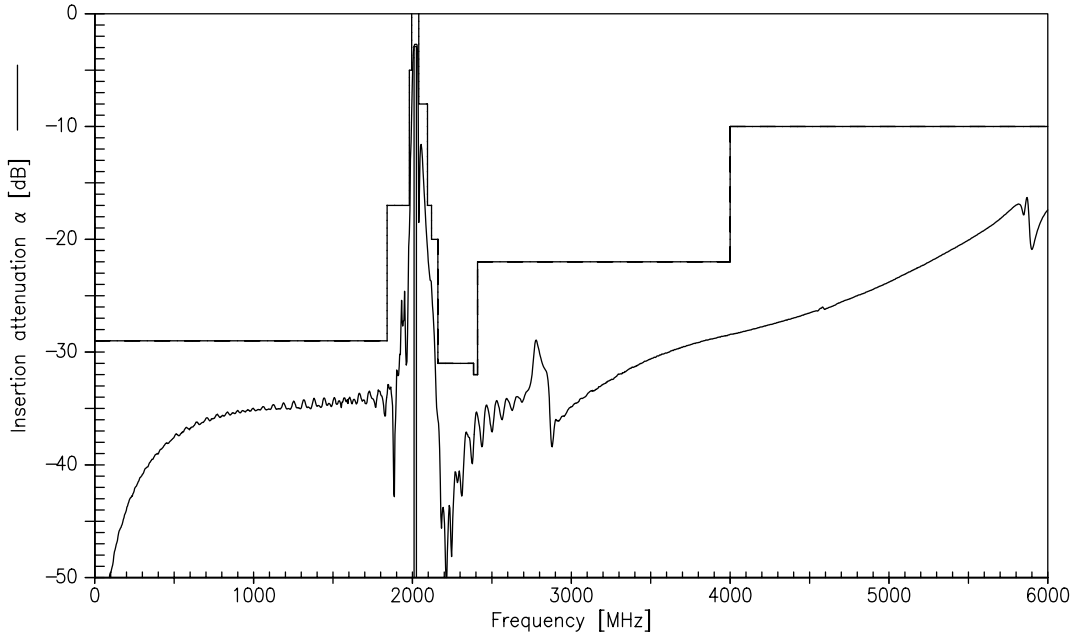
Operable temperature range	T	–40/+85	˚C	
Storage temperature range	T_{stg}	–40/+85	˚C	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}	50 [1)]	V	machine model, 10 pulses
Source power (cw)	P_s	5	dBm	source and load impedance 50 Ω
		15	dBm	0.1% of 5 ms frame

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

Transfer function (narrowband)



Transfer function (wideband)



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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