



# SAW Components

Data Sheet B7750





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Low-Loss Filter for Mobile Communication

2140,0 MHz

Data Sheet



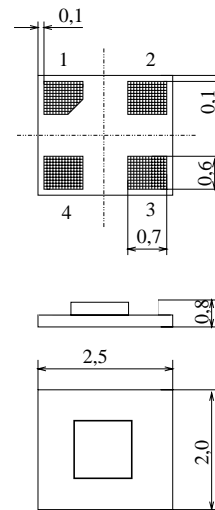
Chip Sized SAW Package DCS4D

**Features**

- RF filter for mobile telephone UMTS systems, receive path
- Low insertion loss, low amplitude ripple
- Usable passband 60 MHz
- Package for Surface Mounted Technology (SMT)

**Terminals**

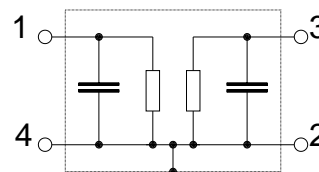
- Gold-plated Ni



Dimensions in mm, approx. weight 0,012 g

**Pin configuration**

- 1 Input
- 3 Output
- 2,4 Ground



Type	Ordering code	Marking and Package according to	Packing according to
B7750	B39212-B7750-C810	C61157-A7-A89	F61074-V8125-Z000

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

Operating temperature range	$T$	- 20/ +85	°C	
Storage temperature range	$T_{stg}$	- 40/ +85	°C	
DC voltage	$V_{DC}$	3	V	
Input Power max.	$P_{IN}$	13	dbm	source and load impedance 50 $\Omega$



**Characteristics**

Operating temperature range:  $T = 25\text{ °C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 50\ \Omega$

		min.	typ.	max.	
<b>Center frequency</b>	$f_C$	—	2140,0	—	MHz
<b>Maximum insertion attenuation</b> 2110,0... 2170,0 MHz	$\alpha_{max}$	—	2,4	2,6	dB
<b>Amplitude ripple (p-p)</b> 2110,0... 2170,0 MHz	$\Delta\alpha$	—	0,7	0,9	dB
<b>Absolute attenuation</b>	$\alpha$				
0 ... 1500,0 MHz		40	43	—	dB
1500,0.. 1880,0 MHz		35	40	—	dB
1920,0.. 1980,0 MHz		34	36	—	dB
2025,0.. 2050,0 MHz		23	25	—	dB
2205,0.. 2265,0 MHz		15	25	—	dB
2230,0.. 2260,0 MHz		22	24	—	dB
2300,0... 2360,0 MHz		33	38	—	dB
2490,0... 2550,0 MHz		37	43	—	dB
2870,0... 2930,0 MHz		31	36	—	dB
4000,0... 6000,0 MHz		20	31	—	dB
<b>Input VSWR</b> 2110,0... 2170,0 MHz		—	1,9	2,1	
<b>Output VSWR</b> 2110,0... 2170,0 MHz		—	1,8	2,0	



**Characteristics**

Operating temperature range :  $T = -20$  to  $+75$  °C  
 Terminating source impedance:  $Z_S = 50 \Omega$   
 Terminating load impedance:  $Z_L = 50 \Omega$

		min.	typ.	max.	
<b>Center frequency</b>	$f_C$	—	2140,0	—	MHz
<b>Maximum insertion attenuation</b> 2110,0... 2170,0 MHz	$\alpha_{max}$	—	2,5	2,7	dB
<b>Amplitude ripple (p-p)</b> 2110,0... 2170,0 MHz	$\Delta\alpha$	—	0,8	1,0	dB
<b>Absolute attenuation</b>	$\alpha$				
0 ... 1500,0 MHz		40	43	—	dB
1500,0.. 1880,0 MHz		35	40	—	dB
1920,0.. 1980,0 MHz		34	36	—	dB
2025,0.. 2050,0 MHz		20	25	—	dB
2205,0.. 2265,0 MHz		10	20	—	dB
2230,0.. 2260,0 MHz		22	24	—	dB
2300,0... 2360,0 MHz		33	38	—	dB
2490,0... 2550,0 MHz		37	43	—	dB
2870,0... 2930,0 MHz		31	35	—	dB
4000,0... 6000,0 MHz		20	31	—	dB
<b>Input VSWR</b> 2110,0... 2170,0 MHz		—	1,9	2,2	
<b>Output VSWR</b> 2110,0... 2170,0 MHz		—	2,0	2,2	



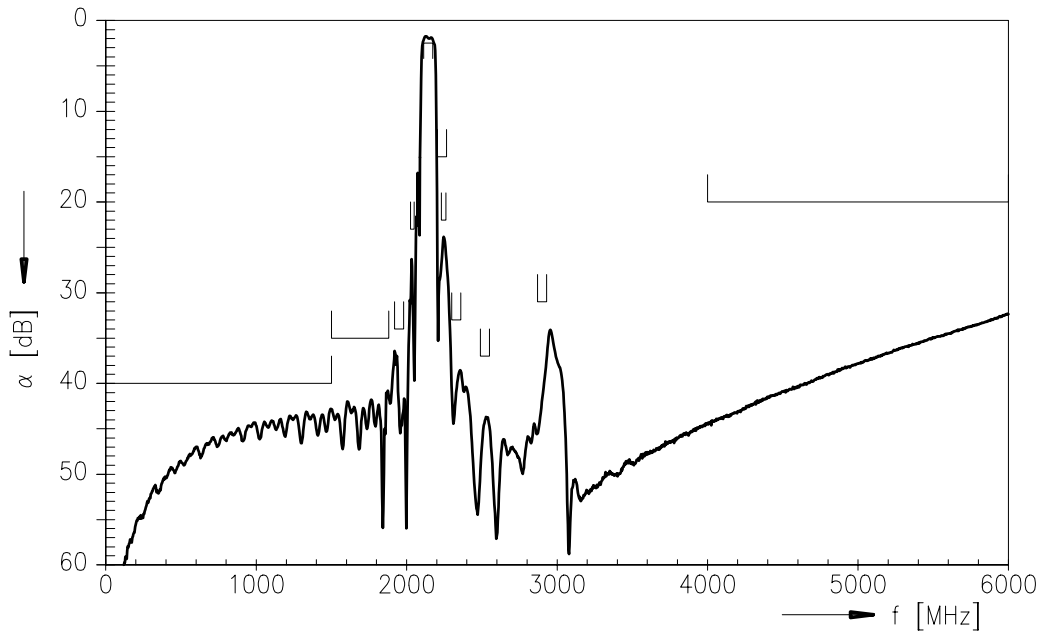
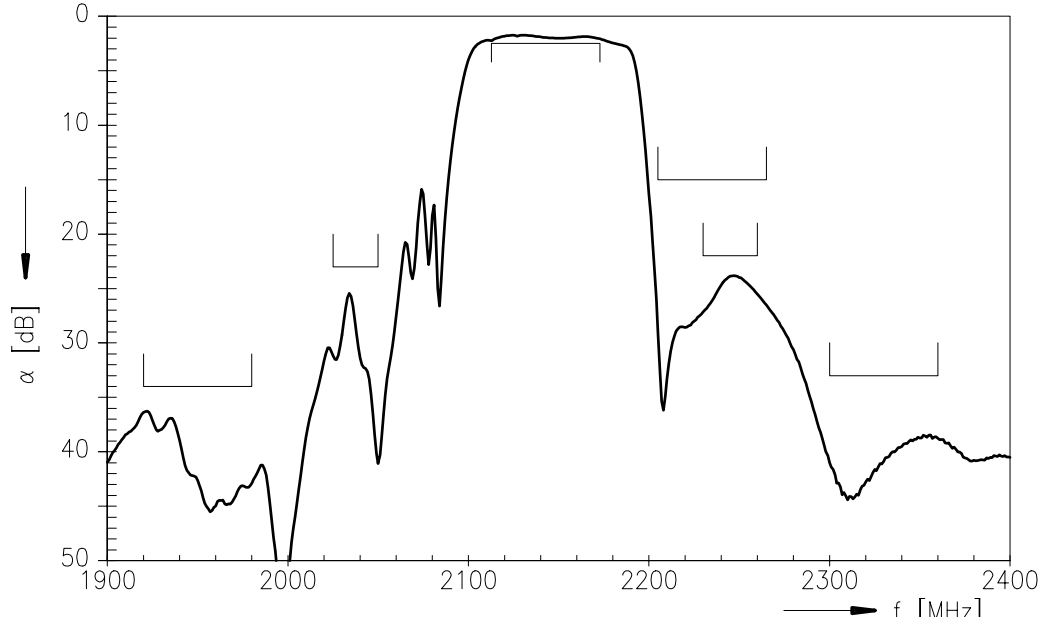
**Characteristics**

Operating temperature range :  $T = -20$  to  $+85$  °C  
 Terminating source impedance:  $Z_S = 50 \Omega$   
 Terminating load impedance:  $Z_L = 50 \Omega$

		min.	typ.	max.	
<b>Center frequency</b>	$f_C$	—	2140,0	—	MHz
<b>Maximum insertion attenuation</b> 2110,0... 2170,0 MHz	$\alpha_{max}$	—	2,6	2,8	dB
<b>Amplitude ripple (p-p)</b> 2110,0... 2170,0 MHz	$\Delta\alpha$	—	0,8	1,0	dB
<b>Absolute attenuation</b>	$\alpha$				
0 ... 1500,0 MHz		40	43	—	dB
1500,0.. 1880,0 MHz		35	40	—	dB
1920,0.. 1980,0 MHz		34	36	—	dB
2025,0.. 2050,0 MHz		20	26	—	dB
2205,0.. 2265,0 MHz		10	20	—	dB
2230,0.. 2260,0 MHz		22	24	—	dB
2300,0... 2360,0 MHz		33	38	—	dB
2490,0... 2550,0 MHz		37	43	—	dB
2870,0... 2930,0 MHz		31	35	—	dB
4000,0... 6000,0 MHz		20	31	—	dB
<b>Input VSWR</b> 2110,0... 2170,0 MHz		—	1,9	2,2	
<b>Output VSWR</b> 2110,0... 2170,0 MHz		—	2,0	2,2	



Transfer function (spec. for 25 °C)





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**B7750**

**Low-Loss Filter for Mobile Communication**

**2140,0 MHz**

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