



# SAW Components

Data Sheet B7754





**SAW Components**

**B7754**

**Low-Loss Filter for Mobile Communication**

**1950,0 MHz**

**Data Sheet**



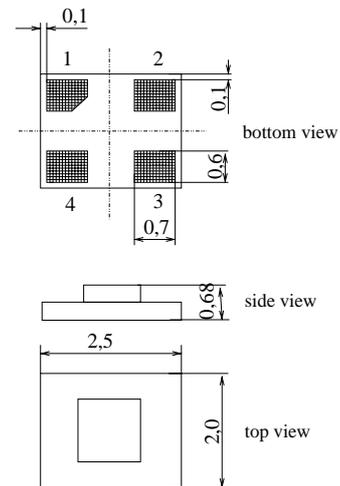
Chip sized SAW package DCS4D

**Features**

- Low-loss RF filter for W-CDMA mobile telephone system, transmit path
- High stopband attenuation
- Usable passband 60 MHz
- Unbalanced/unbalanced operation
- Package size: 2 mm x 2.5 mm (4 pin, diagonal pinning)

**Terminals**

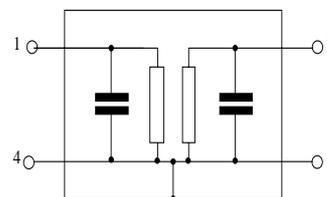
- Ni, gold-plated



Dimensions in mm, approx weight 0,012g

**Pin configuration**

- |     |        |
|-----|--------|
| 1   | Input  |
| 3   | Output |
| 2,4 | Ground |



Type	Ordering code	Marking and Package according to	Packing according to
B7754	B39202-B7754-C810	C61157-A7-A118	F61074-V8153-Z000

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

Operable temperature range	$T$	- 20 / + 85	°C	source impedance 50 $\Omega$
Storage temperature range	$T_{stg}$	- 40 / + 85	°C	
DC voltage	$V_{DC}$	3	V	
Source power	$P_s$	10	dBm	



Data Sheet



Characteristics

Operating temperature range:  $T = +25\text{ °C} \pm 2\text{ °C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 50\ \Omega$

		min.	typ.	max.	
<b>Center frequency</b>	$f_C$	—	1950,0	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{max}$				
	1920,0 ... 1980,0 MHz	—	2,2	2,5	dB
<b>Ripple</b>	p-p				
	1920,0 ... 1980,0 MHz	—	1,0	1,2	dB
<b>Input VSWR</b>					
	1920,0 ... 1980,0 MHz	—	1,9	2,1	
<b>Output VSWR</b>					
	1920,0 ... 1980,0 MHz	—	1,9	2,1	
<b>Attenuation</b>	$\alpha$				
	0,0 ... 1670,0 MHz	26	28	—	dB
	1670,0 ... 1720,0 MHz	29	31	—	dB
	1720,0 ... 1750,0 MHz	30	32	—	dB
	1750,0 ... 1880,0 MHz	31	33	—	dB
	2025,0 ... 2050,0 MHz	35	45	—	dB
	2110,0 ... 2170,0 MHz	34	36	—	dB
	2300,0 ... 2490,0 MHz	34	36	—	dB
	2490,0 ... 2740,0 MHz	35	38	—	dB
	2740,0 ... 3960,0 MHz	30	33	—	dB
	3960,0 ... 6000,0 MHz	15	21	—	dB



Data Sheet



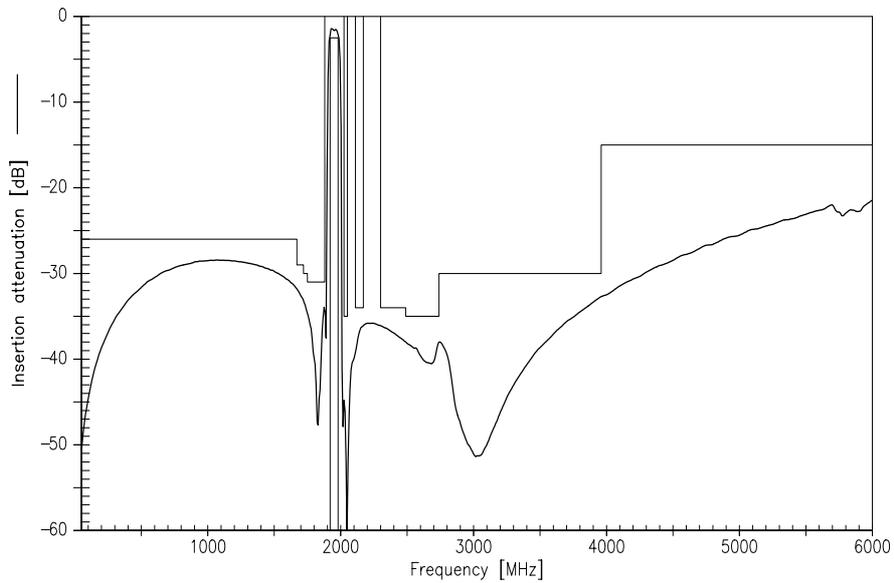
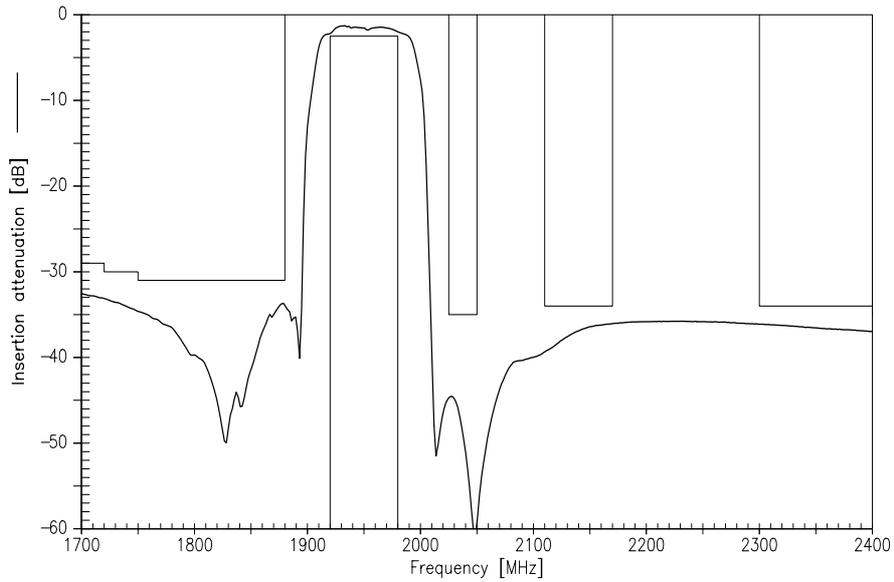
Characteristics

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>	$f_C$	—	1950,0	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{max}$	—	2,4	2,8	dB
1920,0 ... 1980,0 MHz					
<b>Ripple</b>	p-p	—	1,0	1,6	dB
1920,0 ... 1980,0 MHz					
<b>Input VSWR</b>		—	2,0	2,2	
1920,0 ... 1980,0 MHz					
<b>Output VSWR</b>		—	2,0	2,2	
1920,0 ... 1980,0 MHz					
<b>Attenuation</b>	$\alpha$				
0,0 ... 1670,0 MHz		26	28	—	dB
1670,0 ... 1720,0 MHz		29	31	—	dB
1720,0 ... 1750,0 MHz		30	32	—	dB
1750,0 ... 1880,0 MHz		31	33	—	dB
2025,0 ... 2050,0 MHz		35	45	—	dB
2110,0 ... 2170,0 MHz		34	36	—	dB
2300,0 ... 2490,0 MHz		34	36	—	dB
2490,0 ... 2740,0 MHz		35	38	—	dB
2740,0 ... 3960,0 MHz		30	33	—	dB
3960,0 ... 6000,0 MHz		15	21	—	dB



Transfer function (spec for 25°C ± 2 °C):





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