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# SAW Components

Data Sheet B7803

Data Sheet





**SAW Components**

**B7803**

**Low Loss Filter for Mobile Communication**

**1950,0 MHz**

Data Sheet



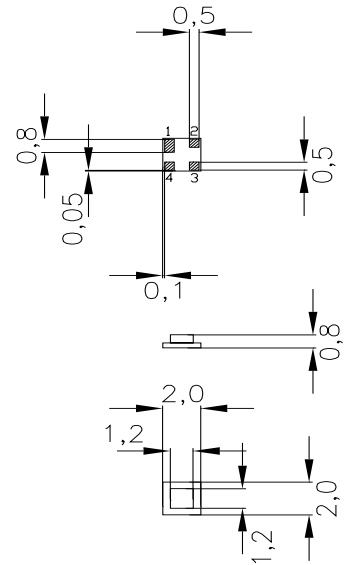
Chip sized SAW package DCS4A

**Features**

- Low-loss RF filter for W-CDMA system, transmit path
- Usable passband 60 MHz
- No matching network required for operation at 50 Ω
- Ceramic package for **Surface Mounted technology (SMT)**

**Terminals**

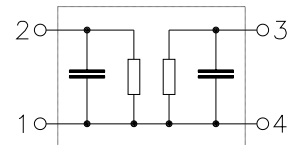
- Ni, gold-plated



Dimensions in mm, approx. weight 0,019 g

**Pin configuration**

- 2 Input
- 1 Input - ground
- 3 Output
- 4 Output - ground



Type	Ordering code	Marking and Package according to	Packing according to
B7803	B39202-B7803-A510	C61157-A7-A63	F61074-V8099-Z000

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

Operable temperature range	$T$	- 20/+ 85	°C	source impedance 50 Ω
Storage temperature range	$T_{stg}$	- 40/+ 85	°C	
DC voltage	$V_{DC}$	0	V	
Source power	$P_s$	10	dBm	



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**Characteristics**

Operating temperature range:  $T = 25^{\circ}\text{C}$   
 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>	$\alpha_{\max}$	—	2,3	2,5	dB
1920,0 ... 1980,0 MHz					
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$	—	0,5	0,7	dB
1920,0 ... 1980,0 MHz					
<b>Amplitude ripple (p-p) per 5-MHz channel</b>	$\Delta\alpha_{\text{ch}}$	—	0,2	0,4	dB
1920,0 ... 1980,0 MHz					
<b>Input VSWR</b>		—	1,8	2,0	
1920,0 ... 1980,0 MHz					
<b>Output VSWR</b>		—	1,8	2,0	
1920,0 ... 1980,0 MHz					
<b>Attenuation</b>	$\alpha$				
50,0 ... 1805,0 MHz		17,0	18,0	—	dB
1805,0 ... 1880,0 MHz		17,0	20,0	—	dB
2110,0 ... 2170,0 MHz		31,0	35,0	—	dB
2170,0 ... 2500,0 MHz		25,0	27,0	—	dB
2500,0 ... 2800,0 MHz		20,0	23,0	—	dB
2800,0 ... 6000,0 MHz		12,0	15,0	—	dB



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**Characteristics**

Operating temperature range:  $T = -20$  to  $+85^{\circ}\text{C}$   
 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>	$\alpha_{\max}$		—	2,5	2,8	dB
		1920,0 ... 1980,0 MHz				
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$		—	0,7	1,0	dB
		1920,0 ... 1980,0 MHz				
<b>Amplitude ripple (p-p) per 5-MHz channel</b>	$\Delta\alpha_{\text{ch}}$		—	0,4	0,5	dB
		1920,0 ... 1980,0 MHz				
<b>Input VSWR</b>			—	1,8	2,0	
		1920,0 ... 1980,0 MHz				
<b>Output VSWR</b>			—	1,8	2,0	
		1920,0 ... 1980,0 MHz				
<b>Attenuation</b>	$\alpha$					
		50,0 ... 1805,0 MHz	17,0	18,0	—	dB
		1805,0 ... 1880,0 MHz	17,0	20,0	—	dB
		2110,0 ... 2170,0 MHz	31,0	35,0	—	dB
		2170,0 ... 2500,0 MHz	25,0	27,0	—	dB
		2500,0 ... 2800,0 MHz	20,0	23,0	—	dB
		2800,0 ... 6000,0 MHz	12,0	15,0	—	dB

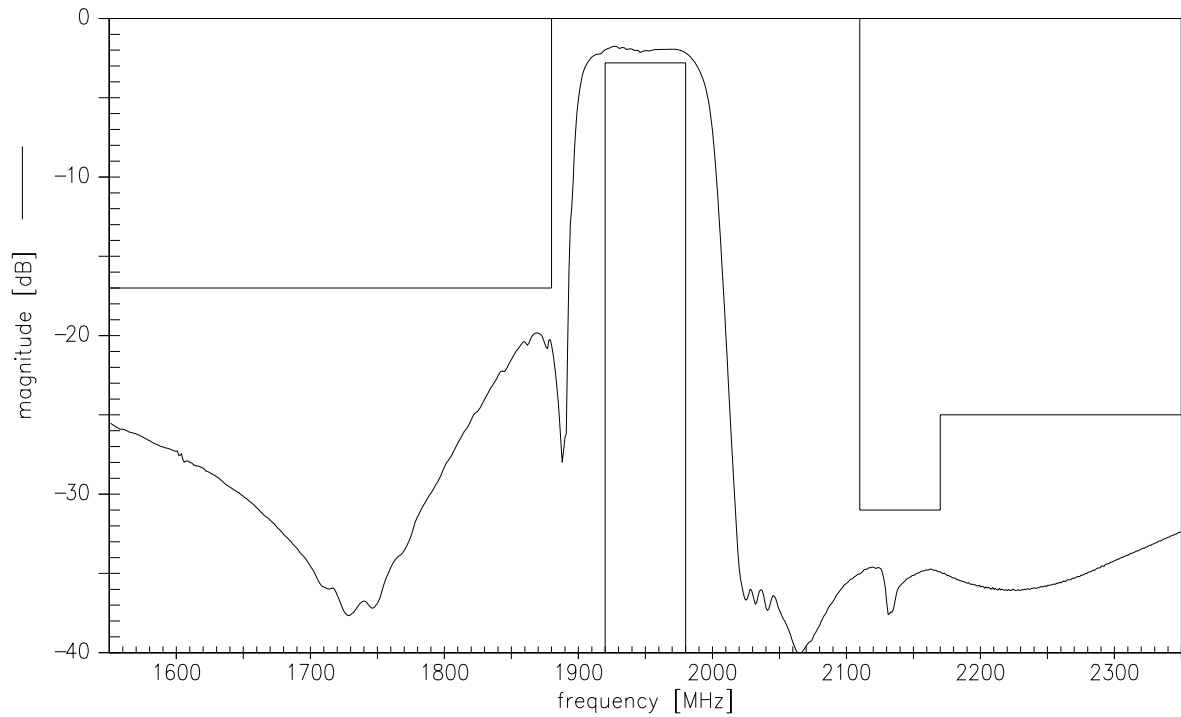


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<b>Low Loss Filter for Mobile Communication</b>	<b>1950,0 MHz</b>

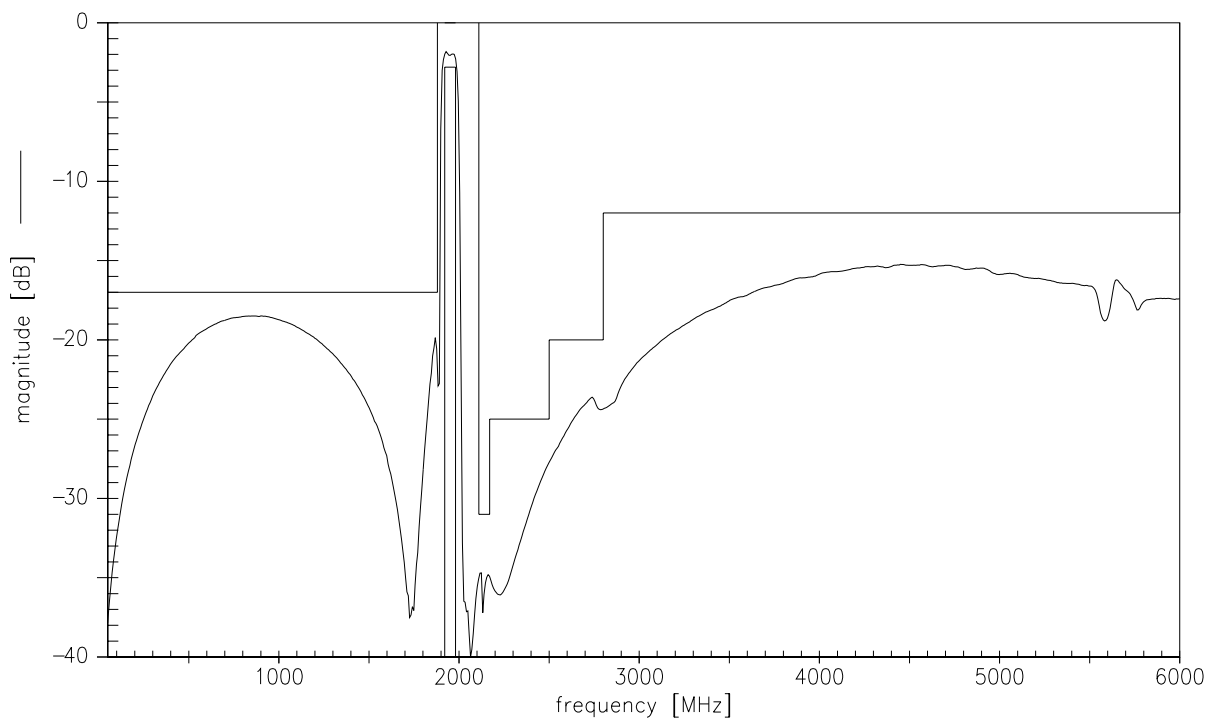
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**Frequency response (narrow band)**



**Frequency response (broad band)**



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