



# SAW Components

Data Sheet B7704





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B7704

## Low-Loss Filter for Mobile Communication

881,5 MHz

### Data Sheet



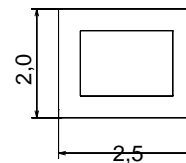
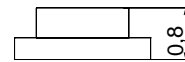
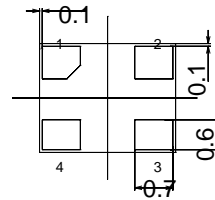
### Chip Sized SAW Package DCS4C

#### Features

- Low-loss RF filter for mobile telephone  
Cell systems, receive path
- Low amplitude ripple
- Usable passband 25 MHz
- Suitable for GPRS class 1 to12
- Package for Surface Mounted  
Technology (SMT)

#### Terminals

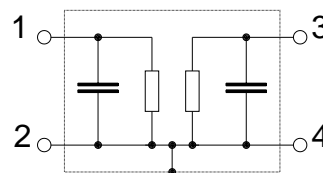
- Gold-plated Ni



Dimensions in mm, approx. weight 0,015 g

#### Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B7704	B39881-B7704-C510	C61157-A7-A80	F61074-V8104-Z000

Electrostatic Sensitive Device (ESD)

#### Maximum ratings

Operating temperature range	$T$	- 30/+ 85	°C	peak power of GSM signal, duty cycle 4:8
Storage temperature range	$T_{stg}$	- 40/+ 85	°C	
DC voltage	$V_{DC}$	5	V	
Input power at GSM850, GSM900, GSM1800 and GSM1900 Tx bands	$P_{IN}$	15	dBm	



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#### Characteristics

Operating temperature range:  $T = -20$  to  $+80$  °C  
Terminating source impedance:  $Z_S = 50 \Omega$   
Terminating load impedance:  $Z_L = 50 \Omega$

			min.	typ.	max.	
<b>Center frequency</b>	$f_C$		—	881,5	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$					
	869,0 ... 894,0 MHz		—	2,4	2,6	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$					
	869,0 ... 894,0 MHz		—	0,8	1,0	dB
<b>Return loss</b>						
	869,0 ... 894,0 MHz		—	12,0	10,0	dB
<b>Attenuation</b>	$\alpha$					
	0,0 ... 780,0 MHz		45,0	62,0	—	dB
	780,0 ... 840,0 MHz		45,0	55,0	—	dB
	840,0 ... 851,0 MHz		38,0	40,0	—	dB
	914,0 ... 924,0 MHz		24,0	26,0	—	dB
	924,0 ... 950,0 MHz		35,0	40,0	—	dB
	950,0 ... 997,0 MHz		35,0	50,0	—	dB
	997,0 ... 2200,0 MHz		40,0	50,0	—	dB
	2200,0 ... 3000,0 MHz		35,0	42,0	—	dB
	3000,0 ... 4000,0 MHz		20,0	28,0	—	dB
	4000,0 ... 6000,0 MHz		10,0	18,0	—	dB
<b>Tx band suppression</b>	$\alpha$					
	824,0 ... 849,0 MHz		38,0	40,0	—	dB



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#### Characteristics

Operating temperature range:  $T = -30$  to  $+85$  °C  
Terminating source impedance:  $Z_S = 50 \Omega$   
Terminating load impedance:  $Z_L = 50 \Omega$

			min.	typ.	max.	
<b>Center frequency</b>	$f_C$		—	881,5	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$					
	869,0 ... 894,0 MHz		—	2,5	2,7	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$					
	869,0 ... 894,0 MHz		—	0,9	1,1	dB
<b>Return loss</b>						
	869,0 ... 894,0 MHz		—	12,0	10,0	dB
<b>Attenuation</b>	$\alpha$					
	0,0 ... 780,0 MHz		45,0	62,0	—	dB
	780,0 ... 840,0 MHz		45,0	55,0	—	dB
	840,0 ... 851,0 MHz		38,0	40,0	—	dB
	914,0 ... 924,0 MHz		24,0	26,0	—	dB
	924,0 ... 950,0 MHz		35,0	40,0	—	dB
	950,0 ... 997,0 MHz		35,0	50,0	—	dB
	997,0 ... 2200,0 MHz		40,0	50,0	—	dB
	2200,0 ... 3000,0 MHz		35,0	42,0	—	dB
	3000,0 ... 4000,0 MHz		20,0	28,0	—	dB
	4000,0 ... 6000,0 MHz		10,0	18,0	—	dB
<b>Tx band suppression</b>	$\alpha$					
	824,0 ... 849,0 MHz		38,0	40,0	—	dB



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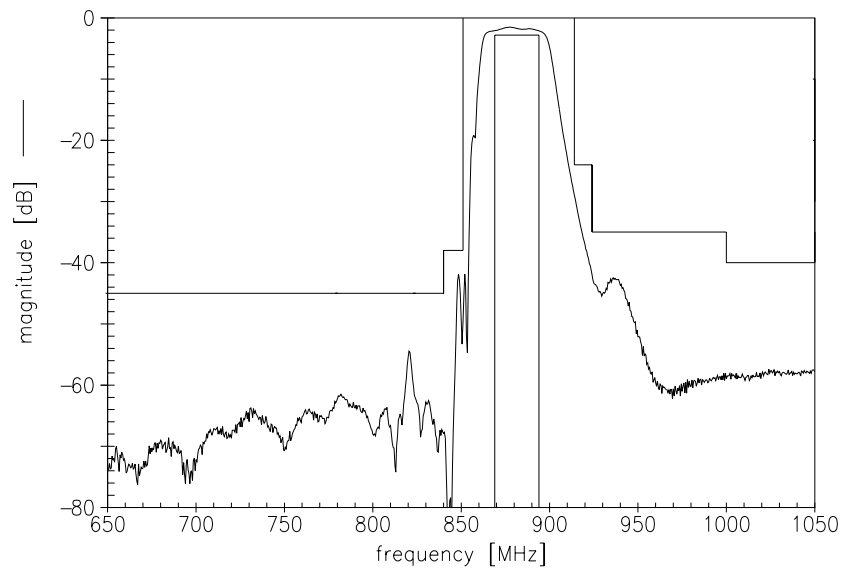
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881,5 MHz

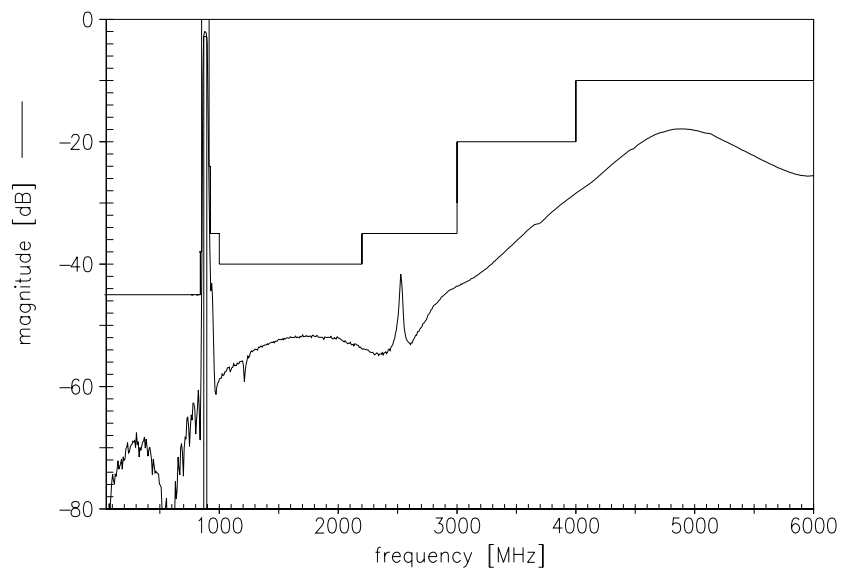
Data Sheet



### Transfer function



### Transfer function (wideband)





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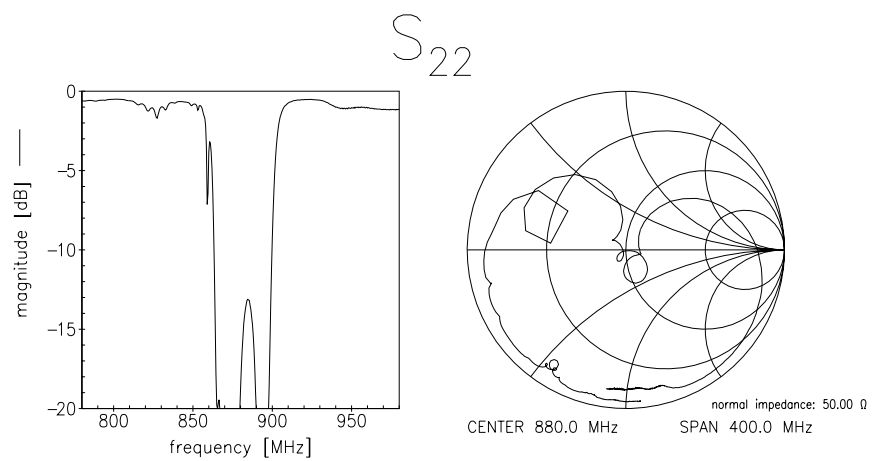
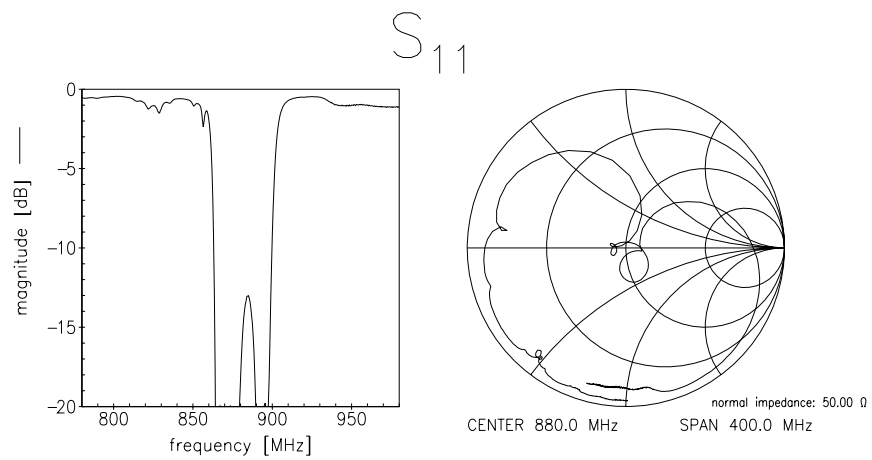
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### Reflection functions





<b>SAW Components</b>	<b>B7704</b>
<b>Low-Loss Filter for Mobile Communication</b>	<b>881,5 MHz</b>
<b>Data Sheet</b>	<b>SMD</b>

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