



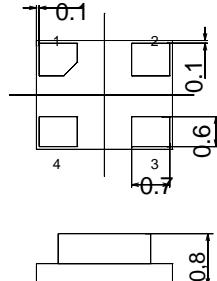
# SAW Components

Data Sheet B7704, Pb-Free

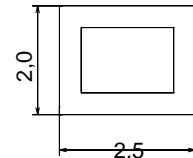


**Features**

- Low-loss RF filter for mobile telephone Cell systems, receive path
- Low amplitude ripple
- Usable passband 25 MHz
- Suitable for GPRS class 1 to 12
- Pb-Free
- Package for **Surface Mounted Technology (SMT)**


**Terminals**

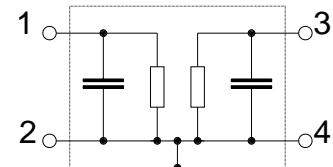
- Gold-plated Ni



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-K710	C61157-A7-A136	F61074-V8189-Z000

**Electrostatic Sensitive Device (ESD)**
**Maximum ratings**

Operating temperature range	$T$	-30/+85	°C	
Storage temperature range	$T_{stg}$	-40/+85	°C	
DC voltage	$V_{DC}$	5	V	
ESD voltage	$V^*_{ESD}$	100	V	Machine Model, 10 pulses
Input Power at GSM850, GSM900, GSM1800 and GSM1900	$P_{IN}$	15	dBm	peak power of GSM signal, duty cycle 4:8
Tx bands				

\*- acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses

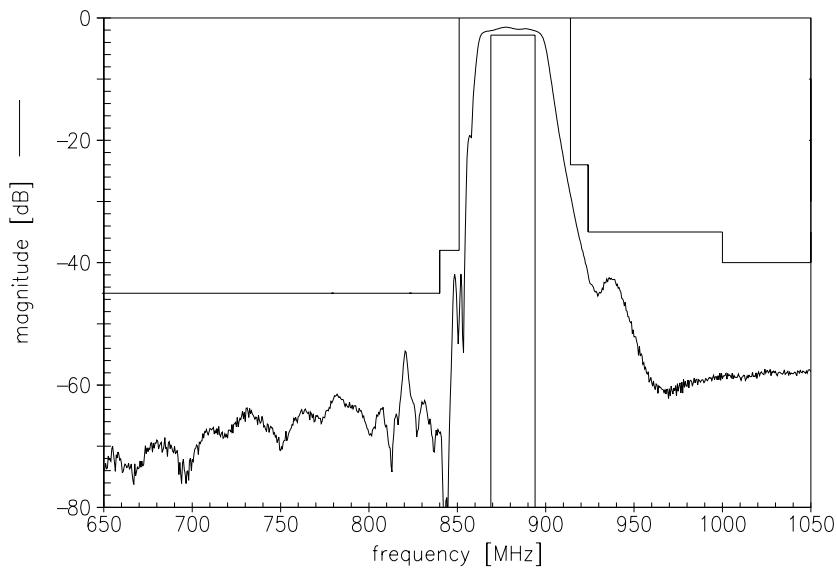
**SAW Components****B7704****Low-Loss Filter for Mobile Communication****881,5 MHz****Data Sheet****Characteristics**Operating temperature range:  $T = -20$  to  $+80$  °CTerminating source impedance:  $Z_S = 50 \Omega$ Terminating load impedance:  $Z_L = 50 \Omega$ 

			<b>min.</b>	<b>typ.</b>	<b>max.</b>	
<b>Center frequency</b>		$f_C$	—	881,5	—	MHz
<b>Maximum insertion attenuation</b>		$\alpha_{\max}$	—	2,4	2,6	dB
	869,0 ... 894,0	MHz	—			
<b>Amplitude ripple (p-p)</b>		$\Delta\alpha$	—	0,8	1,0	dB
	869,0 ... 894,0	MHz	—			
<b>Return loss</b>			—	12,0	10,0	dB
	869,0 ... 894,0	MHz	—			
<b>Attenuation</b>		$\alpha$	45,0	62,0	—	dB
	0,0 ... 780,0	MHz	45,0	55,0	—	dB
	780,0 ... 840,0	MHz	38,0	40,0	—	dB
	840,0 ... 851,0	MHz	24,0	26,0	—	dB
	914,0 ... 924,0	MHz	35,0	40,0	—	dB
	924,0 ... 950,0	MHz	35,0	50,0	—	dB
	950,0 ... 1000,0	MHz	40,0	50,0	—	dB
	1000,0 ... 2200,0	MHz	35,0	42,0	—	dB
	2200,0 ... 3000,0	MHz	20,0	28,0	—	dB
	3000,0 ... 4000,0	MHz	10,0	18,0	—	dB
<b>Tx band suppression</b>		$\alpha$	38,0	40,0	—	dB
	824,0 ... 849,0	MHz	—			

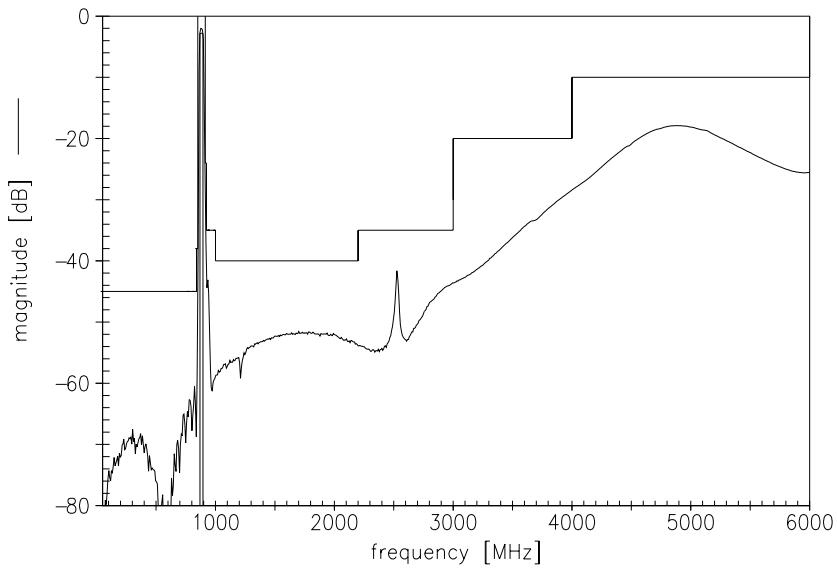
**SAW Components****B7704****Low-Loss Filter for Mobile Communication****881,5 MHz****Data Sheet****Characteristics**Operating temperature range:  $T = -30$  to  $+85$  °CTerminating source impedance:  $Z_S = 50 \Omega$ Terminating load impedance:  $Z_L = 50 \Omega$ 

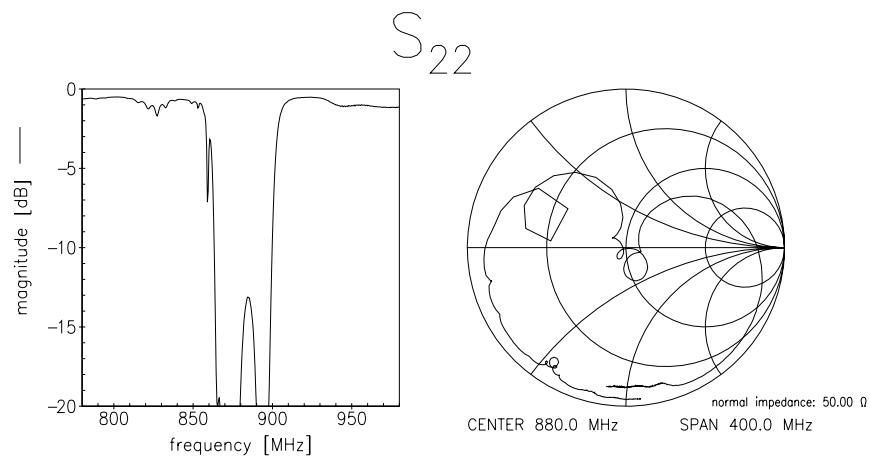
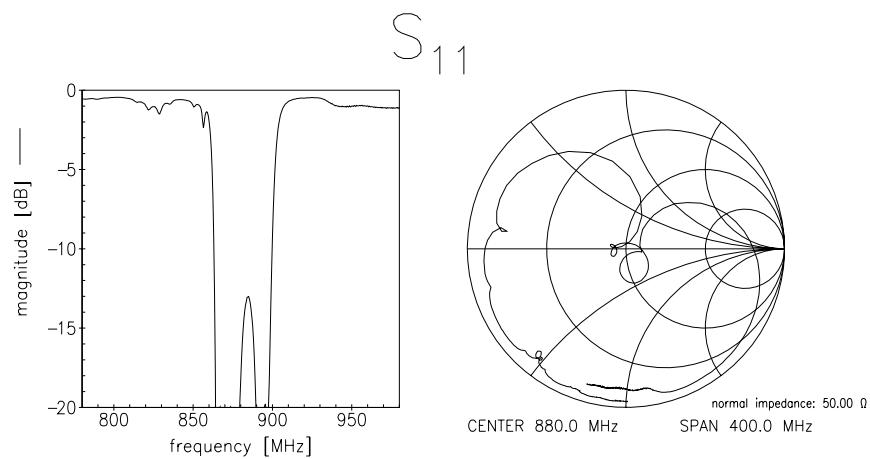
			min.	typ.	max.	
<b>Center frequency</b>		$f_C$	—	881,5	—	MHz
<b>Maximum insertion attenuation</b>		$\alpha_{\max}$	—	2,5	2,7	dB
	869,0 ... 894,0	MHz	—	0,9	1,1	dB
<b>Amplitude ripple (p-p)</b>		$\Delta\alpha$	—	12,0	10,0	dB
	869,0 ... 894,0	MHz	—	45,0	62,0	dB
	780,0 ... 840,0	MHz	45,0	55,0	—	dB
	840,0 ... 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 ... 1000,0	MHz	35,0	50,0	—	dB
	1000,0 ... 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>		$\alpha$	38,0	40,0	—	dB
	824,0 ... 849,0	MHz	—	—	—	—

### Transfer function



### Transfer function (wideband)



**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>	The logo for Surface Mount Device (SMD), consisting of the letters "SMD" in a stylized, blocky font.

**Published by EPCOS AG**

**Surface Acoustic Wave Components Division, SAW MC PD**

**P.O. Box 80 17 09, D-81617 München**

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