



# SAW Components

Data Sheet B7802

Data Sheet

An abstract, grayscale background graphic featuring a globe with a grid pattern. Overlaid on the globe is a large, stylized, 3D-effect word "EPCOS" in a light gray color, which appears to be part of the globe's structure. The word is slanted and has a glowing, metallic appearance.

EPCOS

SAW Components	B7802
Low-Loss Filter for Mobile Communication	1880,00 MHz

## Data Sheet



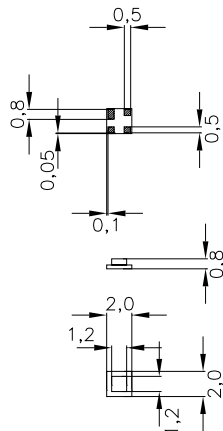
Chip sized SAW package

### Features

- Low-loss RF filter for mobile telephone PCS systems, transmit path
- Usable passband 60 MHz
- No matching network required for operation at 50  $\Omega$
- Ceramic package for **Surface Mounted** technology (**SMT**)

### Terminals

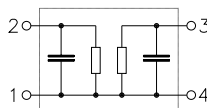
- Ni, gold-plated



Dimensions in mm, approx. weight 0,01 g

### Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B7802	B39192-B7802-A510	C61157-A7-A63	F61074-V8099-Z000

Electrostatic Sensitive Device (ESD)

### Maximum ratings

Operable temperature range	$T$	- 30/+ 80	$^{\circ}\text{C}$	source and load impedance 50 $\Omega$ peak power of GSM signal, duty cycle 1 : 3 CDMA signal
Storage temperature range	$T_{\text{stg}}$	- 40/+ 85	$^{\circ}\text{C}$	
DC voltage	$V_{\text{DC}}$	0	V	
Input power max.	$P_{\text{IN}}$	10	dBm	
		8	dBm	

### Characteristics

Operating temperature range:  $T = +25 \pm 2^\circ \text{C}$

Terminating source impedance:  $Z_S = 50 \Omega$

Terminating load impedance:  $Z_L = 50 \Omega$

			min.	typ.	max.	
<b>Center frequency</b>	$f_c$		—	1880,0	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$					
1850,0 ... 1910,0	MHz		—	3,0	3,6	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$					
1850,0 ... 1910,0	MHz		—	1,5	2,1	dB
<b>VSWR</b>						
1850,0 ... 1910,0	MHz		—	2,0	2,2	
<b>Attenuation</b>	$\alpha$					
10,0 ... 950,0	MHz		15,0	17,0	—	dB
950,0 ... 1050,0	MHz		14,0	15,0	—	dB
1050,0 ... 1580,0	MHz		16,0	18,0	—	dB
1580,0 ... 1720,0	MHz		25,0	28,0	—	dB
1720,0 ... 1780,0	MHz		21,0	23,0	—	dB
1780,0 ... 1800,0	MHz		18,0	20,5	—	dB
1800,0 ... 1830,0	MHz		10,0	20,0	—	dB
1930,0 ... 1990,0	MHz		15,0	24,0	—	dB
1990,0 ... 2400,0	MHz		25,0	28,0	—	dB
2400,0 ... 2800,0	MHz		20,0	24,0	—	dB
2800,0 ... 3500,0	MHz		15,0	18,0	—	dB
3500,0 ... 6000,0	MHz		13,0	15,0	—	dB

**Characteristics**

Operating temperature range:  $T = -30$  to  $+85^{\circ}\text{C}$

Terminating source impedance:  $Z_S = 50\ \Omega$

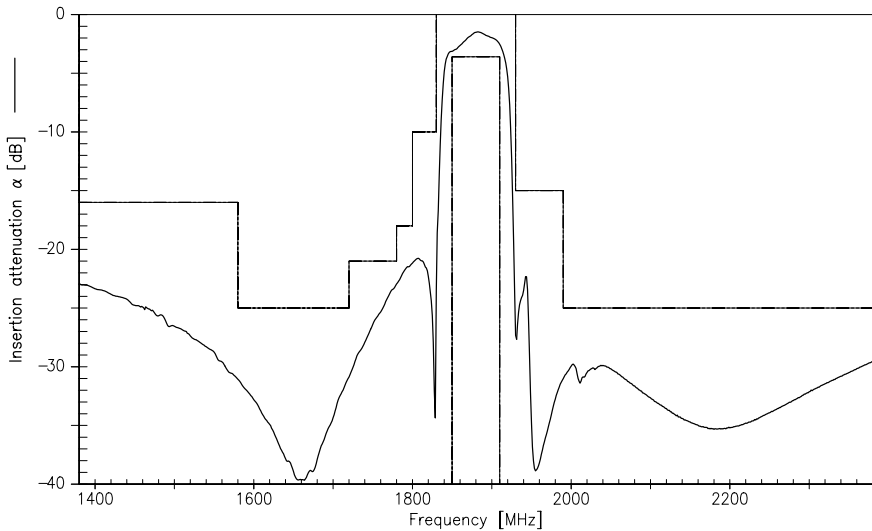
Terminating load impedance:  $Z_L = 50\ \Omega$

			min.	typ.	max.	
<b>Center frequency</b>	$f_c$		—	1880,0	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$					
1850,0 ... 1910,0	MHz		—	3,2	4,3	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$					
1850,0 ... 1910,0	MHz		—	1,8	2,8	dB
<b>VSWR</b>						
1850,0 ... 1910,0	MHz		—	2,0	2,2	
<b>Attenuation</b>	$\alpha$					
10,0 ... 950,0	MHz		15,0	17,0	—	dB
950,0 ... 1050,0	MHz		14,0	15,0	—	dB
1050,0 ... 1580,0	MHz		16,0	18,0	—	dB
1580,0 ... 1720,0	MHz		25,0	28,0	—	dB
1720,0 ... 1780,0	MHz		21,0	23,0	—	dB
1780,0 ... 1800,0	MHz		18,0	20,5	—	dB
1800,0 ... 1830,0	MHz		6,0	16,0	—	dB
1930,0 ... 1990,0	MHz		10,0	19,0	—	dB
1990,0 ... 2400,0	MHz		25,0	28,0	—	dB
2400,0 ... 2800,0	MHz		20,0	24,0	—	dB
2800,0 ... 3500,0	MHz		15,0	18,0	—	dB
3500,0 ... 6000,0	MHz		13,0	15,0	—	dB

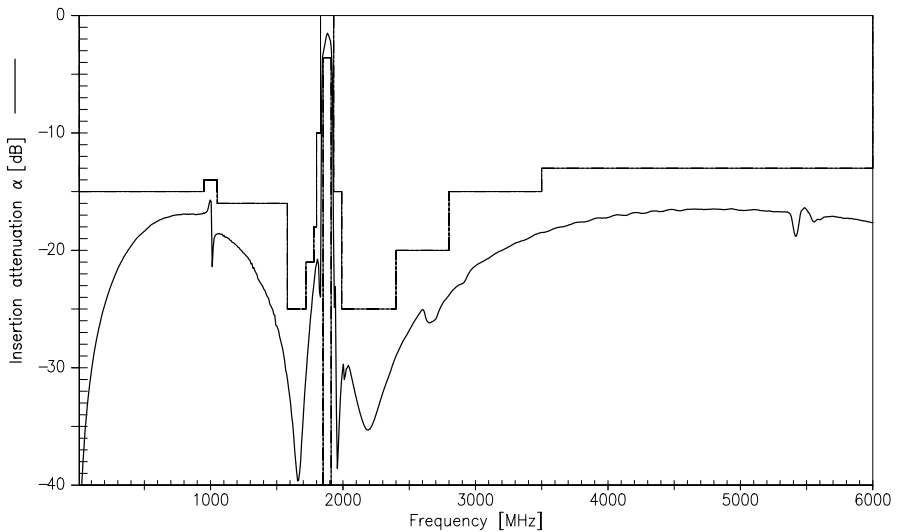
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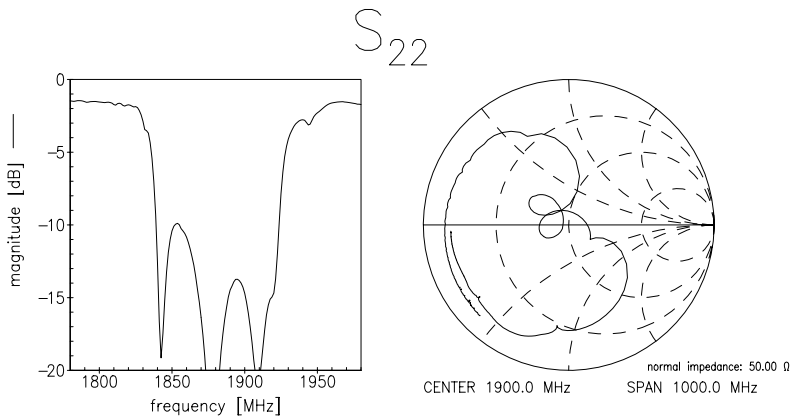
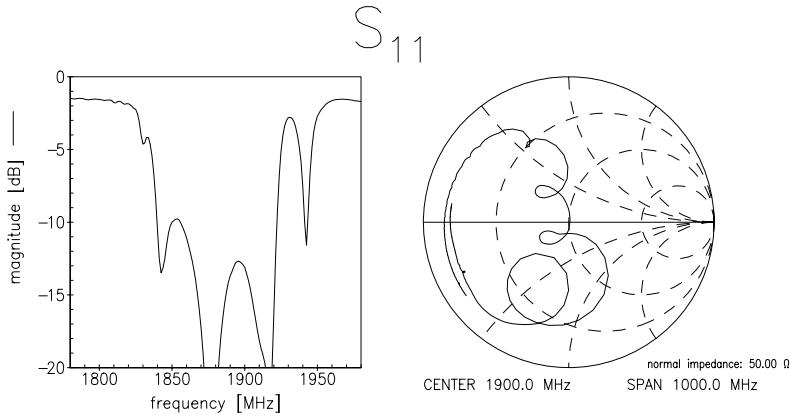


Transfer Function(25°C spec)



Transfer function (wideband)





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

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