



# SAW Components

Data Sheet B7807

Data Sheet

An abstract, grayscale graphic featuring a globe with a grid of latitude and longitude lines. Overlaid on the globe is a large, stylized, 3D-effect word "EPCOS" in a light gray color. The word is tilted and appears to be floating or attached to the globe's surface. The overall composition is dark and moody, with a focus on the company's global presence and technological focus.



## SAW Components

**B7807**

## Low-Loss Filter for Mobile Communication

**1855,00 MHz**

### Data Sheet



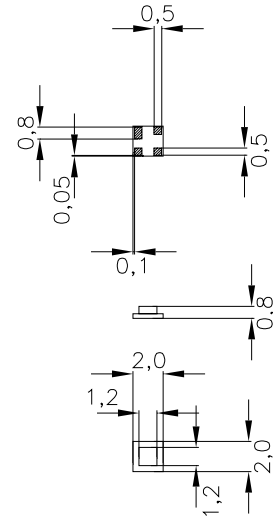
Chip sized SAW package

#### Features

- Low-loss RF filter for mobile telephone Korean PCS systems, receive path
- Usable passband 30 MHz
- No matching network required for operation at 50  $\Omega$
- Ceramic package for **Surface Mounted** technology (**SMT**)

#### Terminals

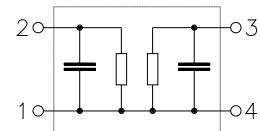
- Ni, gold-plated



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
B7807	B39192-B7807-A510	C61157-A7-A63	F61074-V8099-Z000

Electrostatic Sensitive Device (ESD)

#### Maximum ratings

Operable temperature range	$T$	- 30/+ 85	$^{\circ}\text{C}$	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	



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### 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>	$f_c$		—	1855,0	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$					
	1840,0 ... 1870,0	MHz	—	2,7	3,1	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$					
	1840,0 ... 1870,0	MHz	—	0,8	1,1	dB
<b>VSWR</b>						
	1840,0 ... 1870,0	MHz	—	2,1	2,4	
<b>Attenuation</b>	$\alpha$					
	1440,0 ... 1470,0	MHz	25,0	27,0	—	dB
	1750,0 ... 1780,0	MHz (Tx)	22,0	24,0	—	dB
	1930,0 ... 1960,0	MHz	27,0	34,0	—	dB
	2240,0 ... 2270,0	MHz	30,0	38,0	—	dB



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### 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>	$f_c$		—	1855,0	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$		—	2,7	3,1	dB
		1840,0 ... 1870,0 MHz				
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$		—	0,8	1,1	dB
		1840,0 ... 1870,0 MHz				
<b>VSWR</b>			—	2,1	2,4	
		1840,0 ... 1870,0 MHz				
<b>Attenuation</b>	$\alpha$					
		1440,0 ... 1470,0 MHz	25,0	27,0	—	dB
		1750,0 ... 1780,0 MHz	22,0	24,0	—	dB
		1930,0 ... 1960,0 MHz	27,0	34,0	—	dB
		2240,0 ... 2270,0 MHz	30,0	38,0	—	dB



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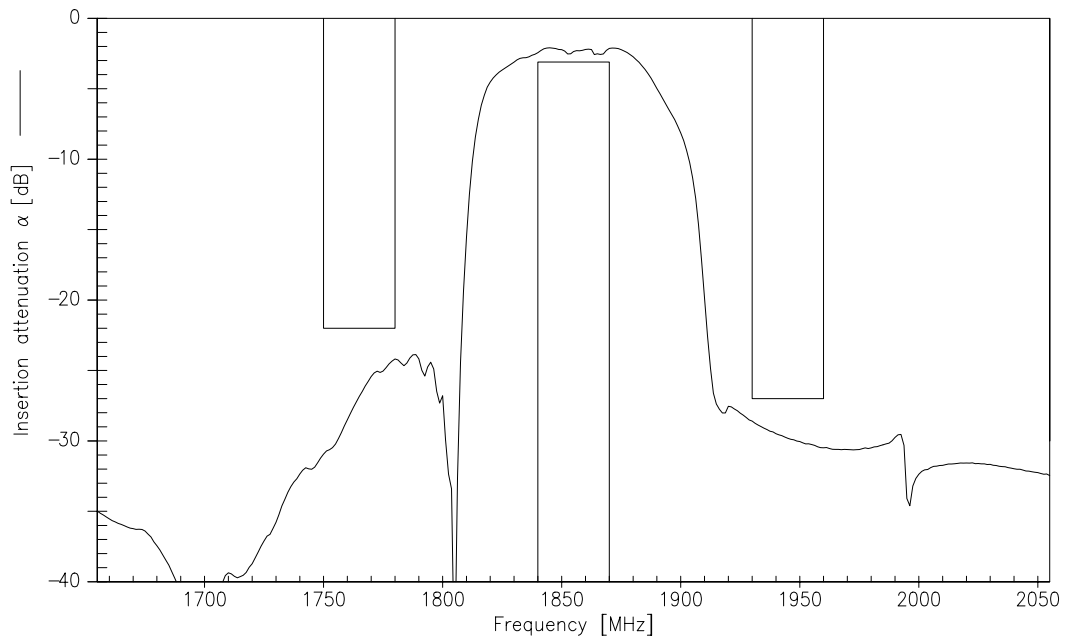
Low-Loss Filter for Mobile Communication

1855,00 MHz

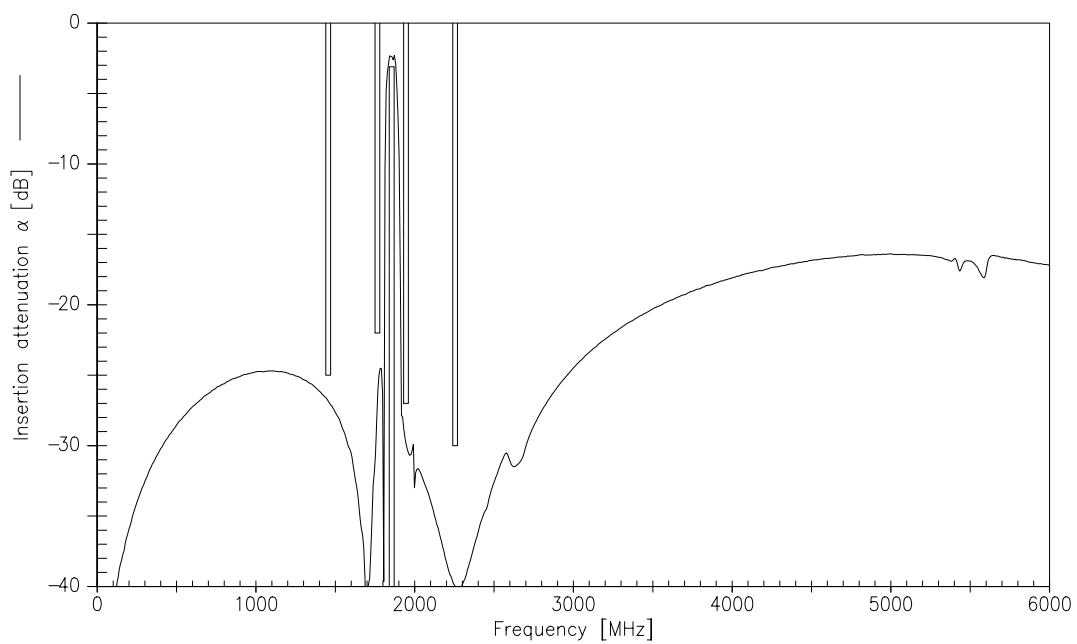
Data Sheet



Transfer function (25°C spec)



Transfer function (wideband)





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Low-Loss Filter for Mobile Communication

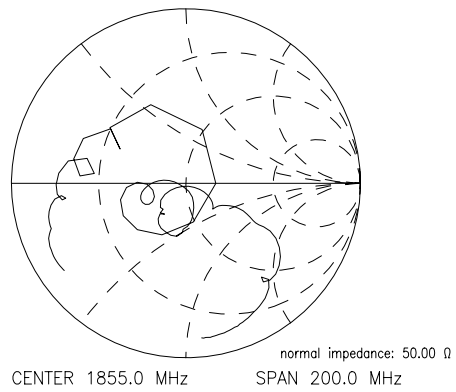
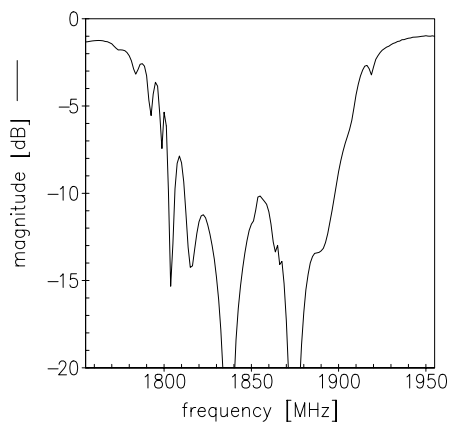
1855,00 MHz

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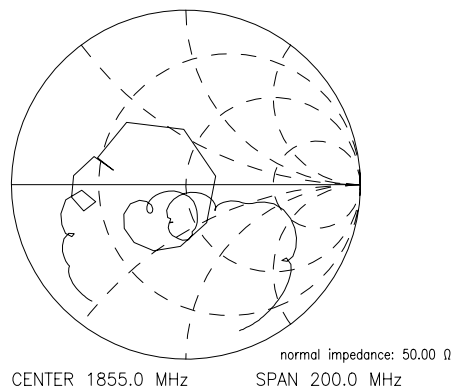
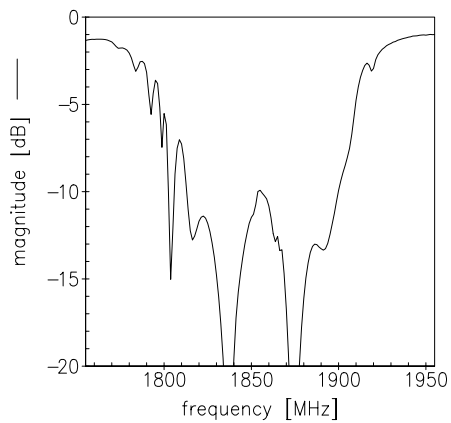


Reflection functions

$S_{11}$



$S_{22}$





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<b>Data Sheet</b>	<b>SMD</b>

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