



# *SAW Components*

*Data Sheet B7807*

Data Sheet

A large, stylized, 3D-rendered graphic of the EPCOS logo. The letters "EPCOS" are rendered in a white, glowing, sans-serif font, appearing to be part of a larger, curved structure that resembles a globe or a stylized wave. The background is dark and textured.



**SAW Components**

**B7807**

**Low-Loss Filter for Mobile Communication**

**1855,00 MHz**

**Data Sheet**



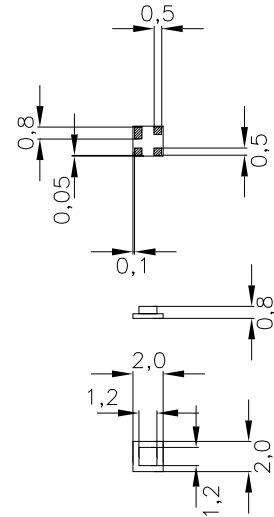
Chip sized SAW package

**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 Ω
- Ceramic package for **Surface Mounted technology (SMT)**

**Terminals**

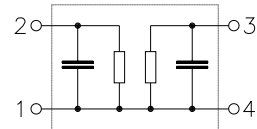
- Ni, gold-plated



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	°C	CDMA signal
Storage temperature range	$T_{stg}$	- 40/+ 85	°C	
DC voltage	$V_{DC}$	0	V	
Input power max.	$P_{IN}$	10	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>	$f_c$		—	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>	$\alpha$		25,0	27,0	—	dB
		1440,0 ... 1470,0 MHz				
		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



**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>	$\alpha_{\max}$	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
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		2240,0 ... 2270,0 MHz	30,0	38,0	—	dB



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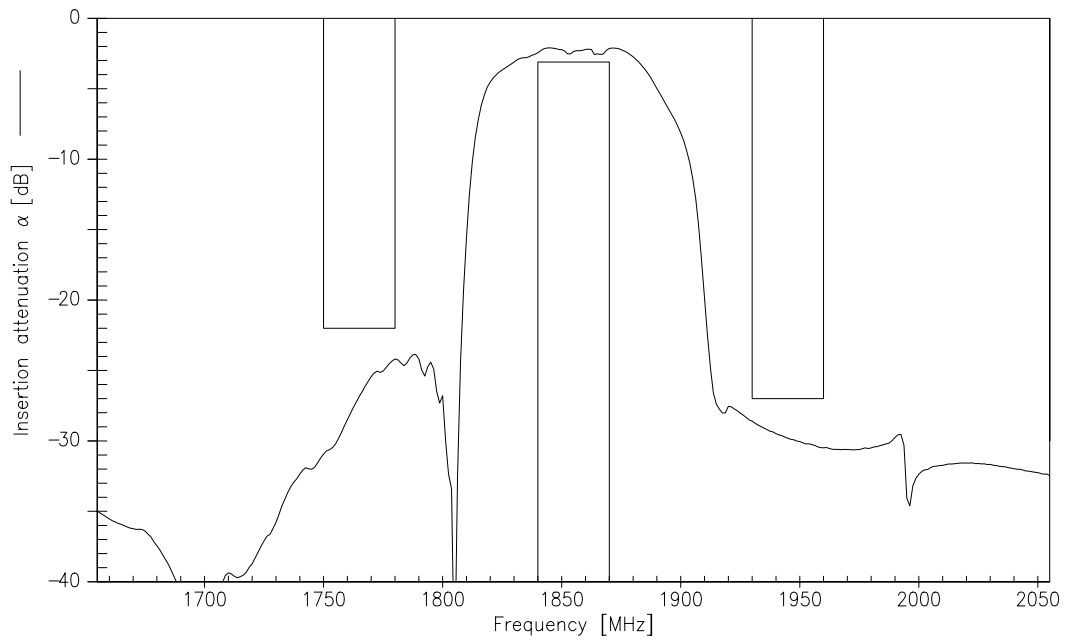
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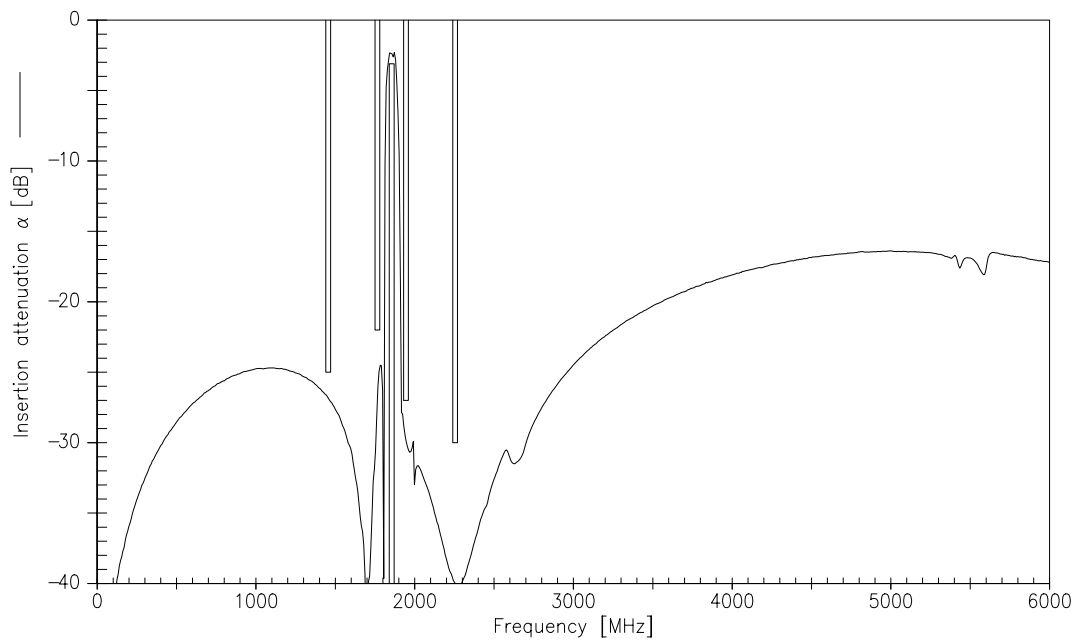
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Transfer function (25° C spec)



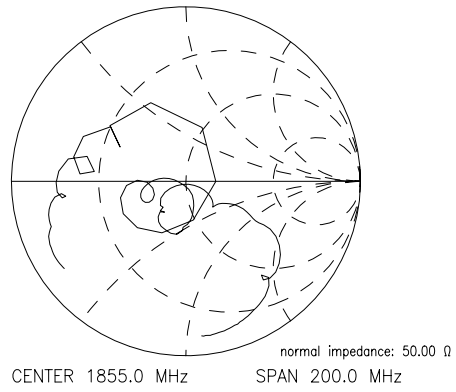
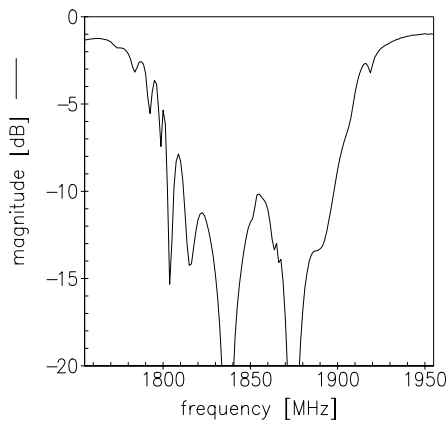
Transfer function (wideband)



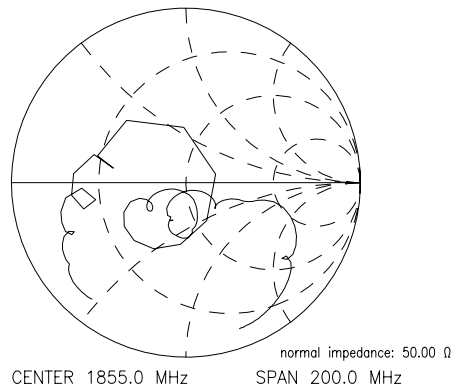
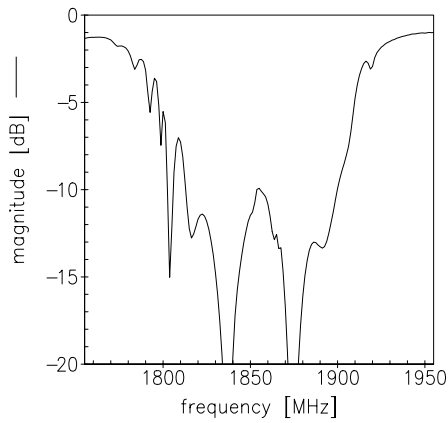


Reflection functions

$S_{11}$



$S_{22}$





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