



SAW Components

Data Sheet B7807

Data Sheet

An abstract graphic featuring the word "EPCOS" in large, glowing, 3D letters. The letters are white with a blue glow and are positioned diagonally across the frame. The background is dark and textured, with a faint globe and circuitry patterns visible. The overall effect is high-tech and futuristic.



SAW Components

B7807

Low-Loss Filter for Mobile Communication

1855,00 MHz

Data Sheet



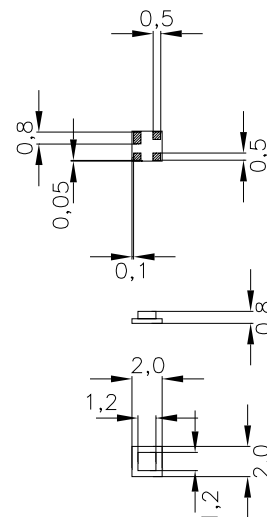
Chip sized SAW package

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

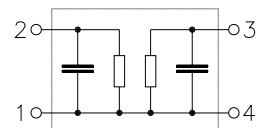
- Ni, gold-plated



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	$^{\circ}\text{C}$	CDMA signal
Storage temperature range	T_{stg}	- 40/+ 85	$^{\circ}\text{C}$	
DC voltage	V_{DC}	0	V	
Input power max.	P_{IN}	10	dBm	



SAW Components		B7807
Low-Loss Filter for Mobile Communication		1855,00 MHz
Data Sheet		

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.	
Center frequency	f_c		—	1855,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$					
	1840,0 ...1870,0	MHz	—	2,7	3,1	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	1840,0 ...1870,0	MHz	—	0,8	1,1	dB
VSWR						
	1840,0 ...1870,0	MHz	—	2,1	2,4	
Attenuation	α					
	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



SAW Components

B7807

Low-Loss Filter for Mobile Communication

1855,00 MHz

Data Sheet



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.	
Center frequency	f_c		—	1855,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$					
	1840,0 ...1870,0	MHz	—	2,7	3,1	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	1840,0 ...1870,0	MHz	—	0,8	1,1	dB
VSWR						
	1840,0 ...1870,0	MHz	—	2,1	2,4	
Attenuation	α					
	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



SAW Components

B7807

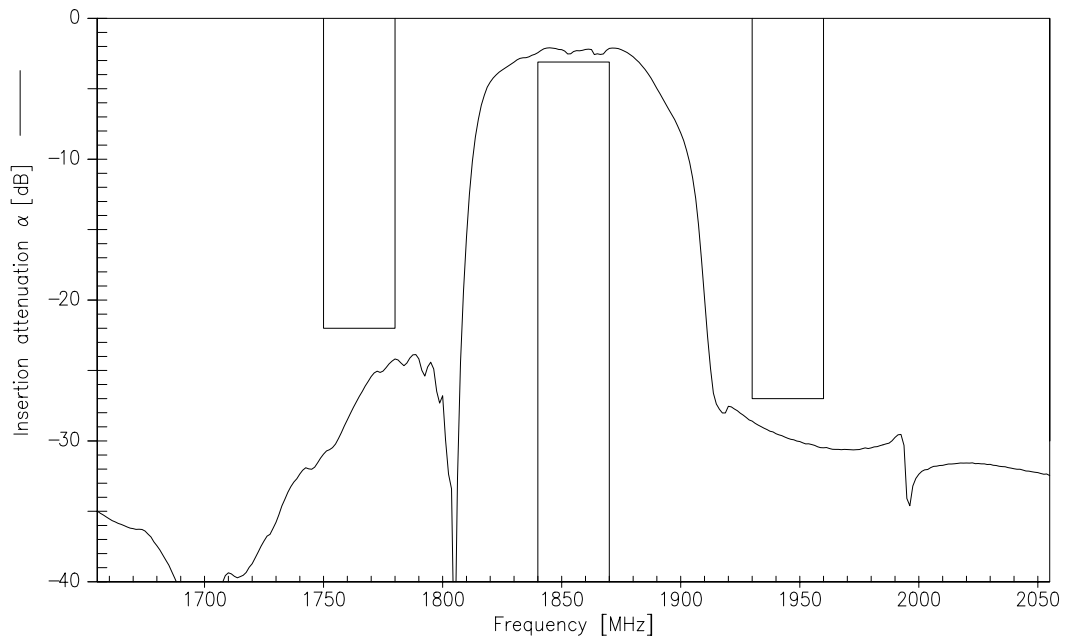
Low-Loss Filter for Mobile Communication

1855,00 MHz

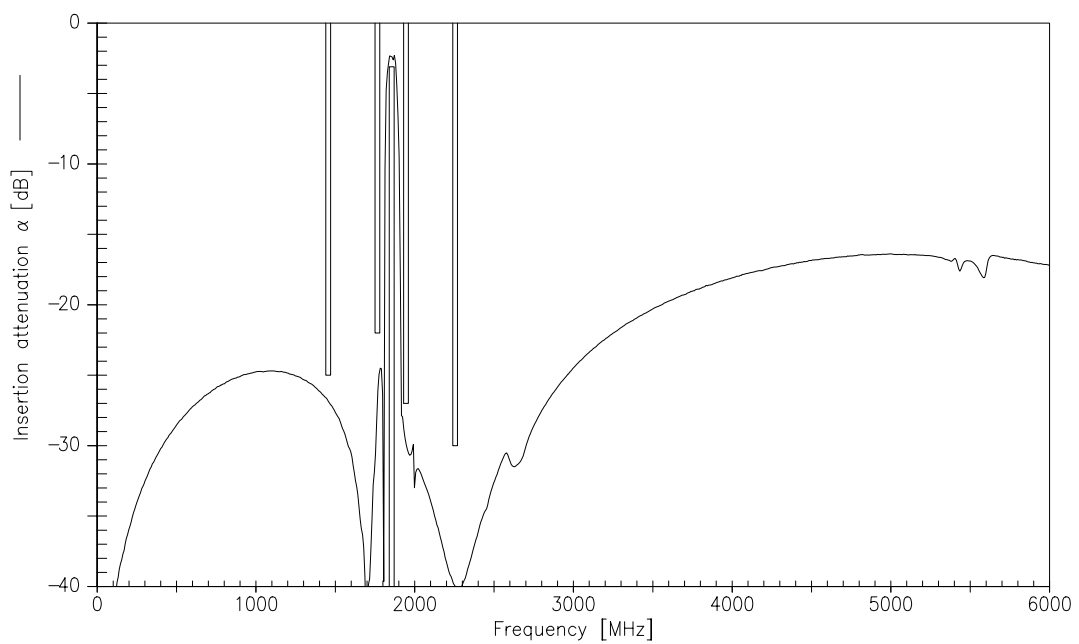
Data Sheet



Transfer function (25°C spec)



Transfer function (wideband)





SAW Components

B7807

Low-Loss Filter for Mobile Communication

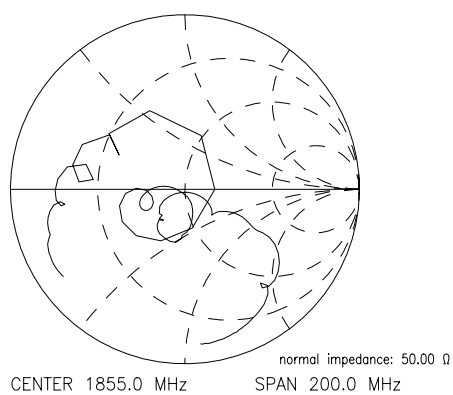
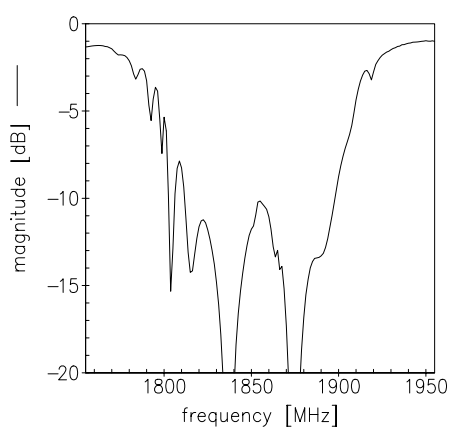
1855,00 MHz

Data Sheet

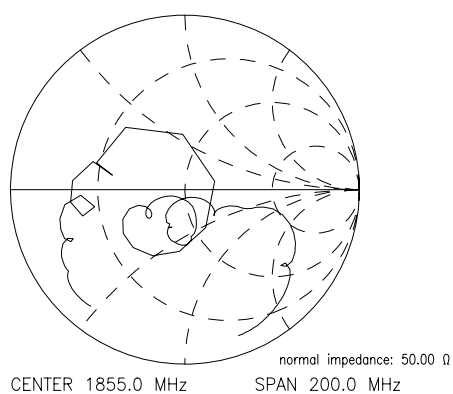
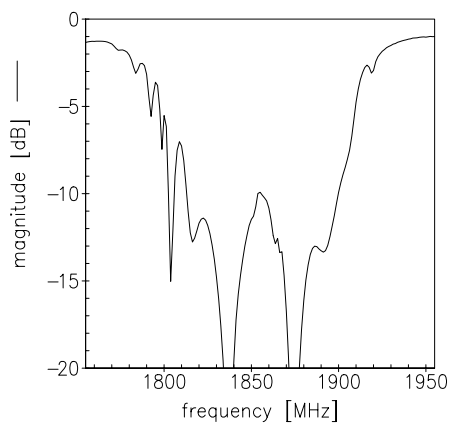


Reflection functions

S_{11}



S_{22}





SAW Components	B7807
Low-Loss Filter for Mobile Communication	1855,00 MHz
Data Sheet	SMD

Published by EPCOS AG
Surface Acoustic Wave Components Division, OFW E MF
P.O. Box 80 17 09, D-81617 München

© EPCOS AG 1999. All Rights Reserved.

As far as patents or other rights of third parties are concerned, liability is only assumed for components per se, not for applications, processes and circuits implemented within components or assemblies.

The information describes the type of component and shall not be considered as assured characteristics.

Terms of delivery and rights to change design reserved.

For questions on technology, prices and delivery please contact the sales offices of EPCOS AG or the international representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our sales offices.