



# SAW Components

Preliminary Data Sheet B7747





SAW Components

B7747

Low-Loss Filter for Mobile Communication

1880,0 MHz

Preliminary Data Sheet



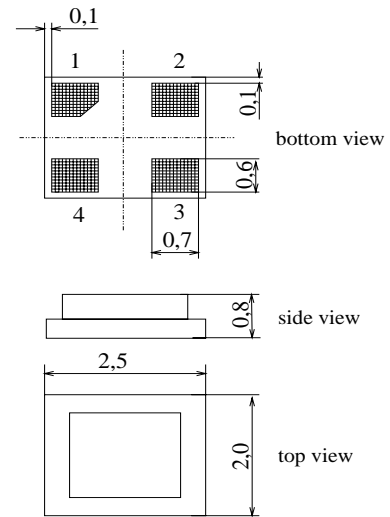
Chip Sized SAW Package DCS4D

Features

- Low-loss RF filter for mobile telephone PCS systems, transmit path
- High selectivity
- Usable passband 60 MHz
- Unbalanced to unbalanced operation
- No external matching required
- Package for **Surface Mounted Technology (SMT)**

Terminals

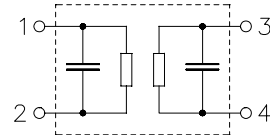
- Gold-plated Ni



Dimensions in mm, approx. weight 0,027g

Pin configuration

- 1 Input
- 3 Output
- 2, 4 To be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B7747	B39192-B7747-C810	C61157-A7-A89	F61074-V8153-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operating temperature range	$T$	- 30 /+ 85	°C	
Storage temperature range	$T_{stg}$	- 40 /+ 85	°C	
DC voltage	$V_{DC}$	3	V	
Input Power max.	$P_{IN}$	15	dBm	source impedance 50 $\Omega$



SAW Components

B7747

Low-Loss Filter for Mobile Communication

1880,0 MHz

Preliminary Data Sheet



**Characteristics**

Operating Temperature Range:  $T = 25^{\circ}\text{C}$   
 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	—	2,9	3,8	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$				
	1850,0 ... 1910,0 MHz	—	1,5	2,5	dB
<b>Input VSWR</b>					
	1850,0 ... 1910,0 MHz	—	1,8	2,1	
<b>Output VSWR</b>					
	1850,0 ... 1910,0 MHz	—	1,8	2,1	
<b>Attenuation</b>	$\alpha$				
	0,0 ... 1720,0 MHz	25,0	28,0	—	dB
	1930,0 ... 1935,0 MHz	22,0	25,0	—	dB
	1935,0 ... 1990,0 MHz	26,0	29,0	—	dB
	2032,0 ... 2092,0 MHz	34,0	36,0	—	dB
	2150,0 ... 2340,0 MHz	34,0	36,0	—	dB
	2340,0 ... 5000,0 MHz	20,0	26,0	—	dB



SAW Components

B7747

Low-Loss Filter for Mobile Communication

1880,0 MHz

Preliminary Data Sheet



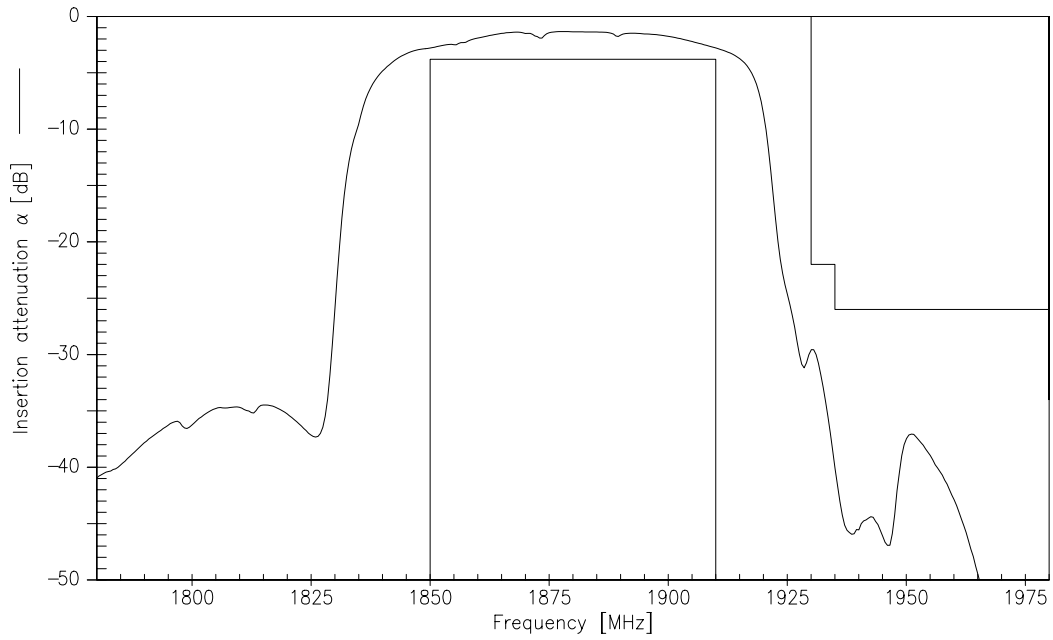
**Characteristics**

Operating Temperature Range:  $T = -30$  to  $+85^{\circ}\text{C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 50\ \Omega$

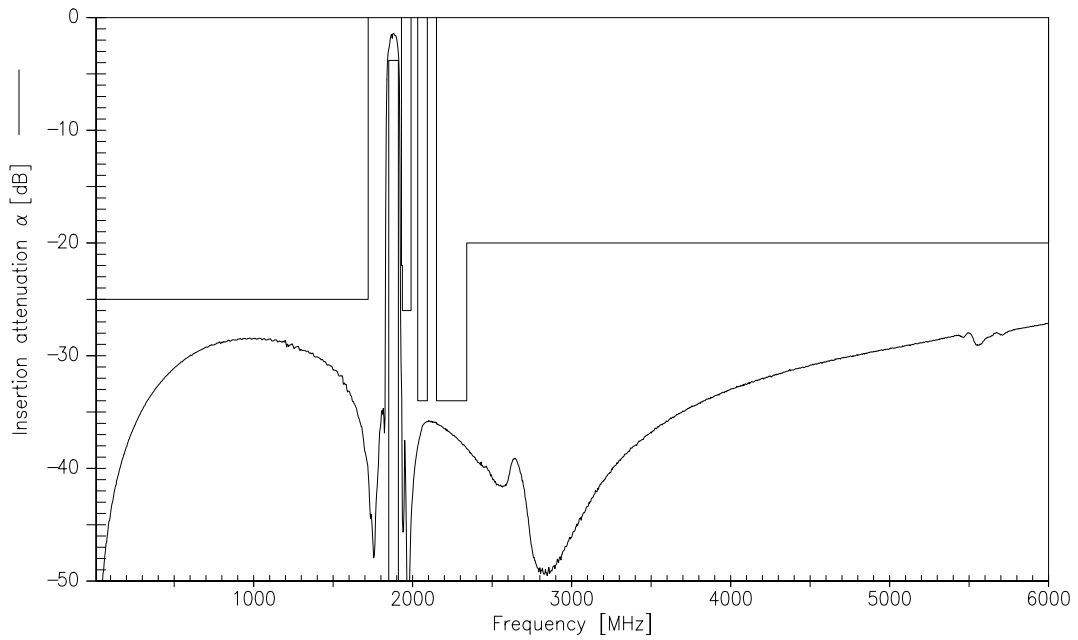
		min.	typ.	max.	
<b>Center frequency</b>	$f_C$	—	1880,0	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$				
1850,0 ... 1910,0	MHz	—	2,9	4,7	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$				
1850,0 ... 1910,0	MHz	—	1,5	3,4	dB
<b>Input VSWR</b>					
1850,0 ... 1910,0	MHz	—	1,8	2,1	
<b>Output VSWR</b>					
1850,0 ... 1910,0	MHz	—	1,8	2,1	
<b>Attenuation</b>	$\alpha$				
0,0 ... 1720,0	MHz	25,0	28,0	—	dB
1930,0 ... 1935,0	MHz	18,0	25,0	—	dB
1935,0 ... 1990,0	MHz	26,0	29,0	—	dB
2032,0 ... 2092,0	MHz	34,0	36,0	—	dB
2150,0 ... 2340,0	MHz	34,0	36,0	—	dB
2340,0 ... 5000,0	MHz	20,0	26,0	—	dB



Transfer function (measurement)

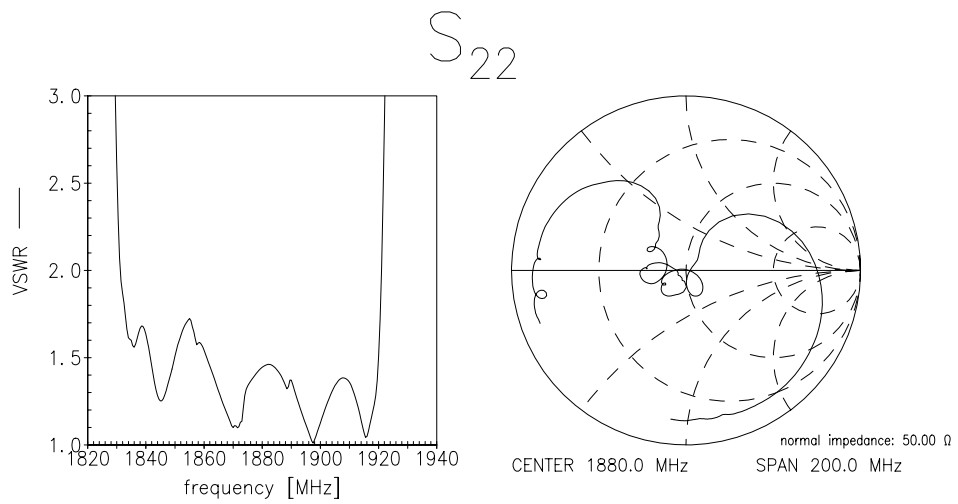
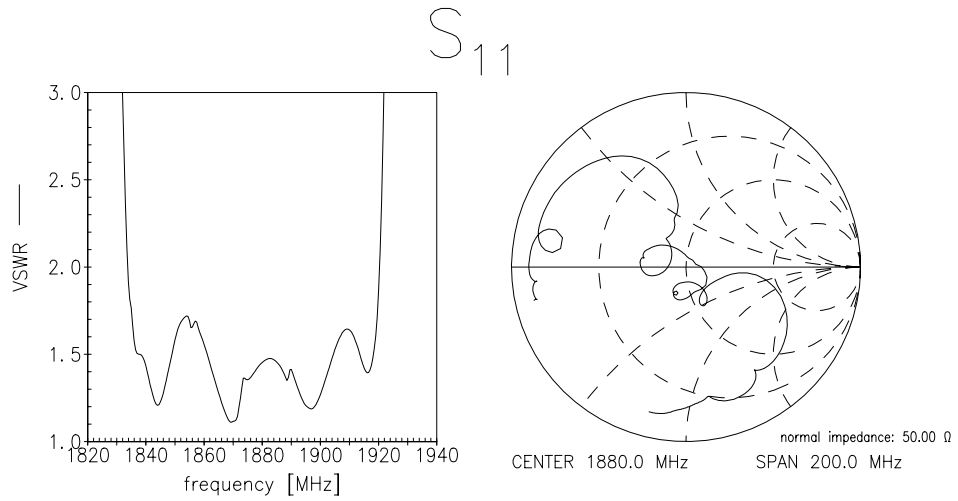


Transfer function (wideband measurement)





Matching (measurement)





**SAW Components**

**B7747**

**Low-Loss Filter for Mobile Communication**

**1880,0 MHz**

Preliminary Data Sheet



**Published by EPCOS AG**

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

**P.O. Box 80 17 09, 81617 Munich, GERMANY**

© EPCOS AG 2002. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

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.