



# SAW Components

Data Sheet B7843





**SAW Components**

**B7843**

**Low-Loss Filter for Mobile Communication**

**1855,00 MHz**

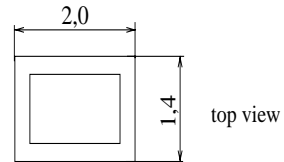
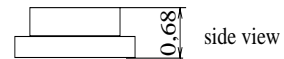
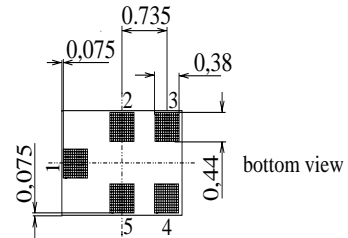
**Data Sheet**



Chip sized SAW package

**Features**

- Low-loss RF filter for mobile telephone Korean PCS systems, receive path
- Usable passband 30 MHz
- Unbalanced to balanced operation
- Impedance transformation from 50 Ω to 100 Ω
- Ceramic package for **Surface Mounted technology (SMT)**



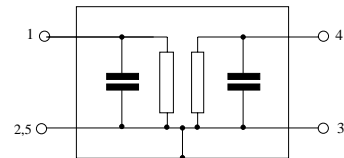
Dimensions in mm, approx. weight 0,009 g

**Terminals**

- Ni, gold-plated

**Pin configuration**

- 1 Input
- 3, 4 Balanced Output
- 2,5 Case ground



Type	Ordering code	Marking and Package according to	Packing according to
B7843	B39192-B7843-C710	C61157-A7-A111	F61074-V8151-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.	$P_{IN}$	0	dBm	



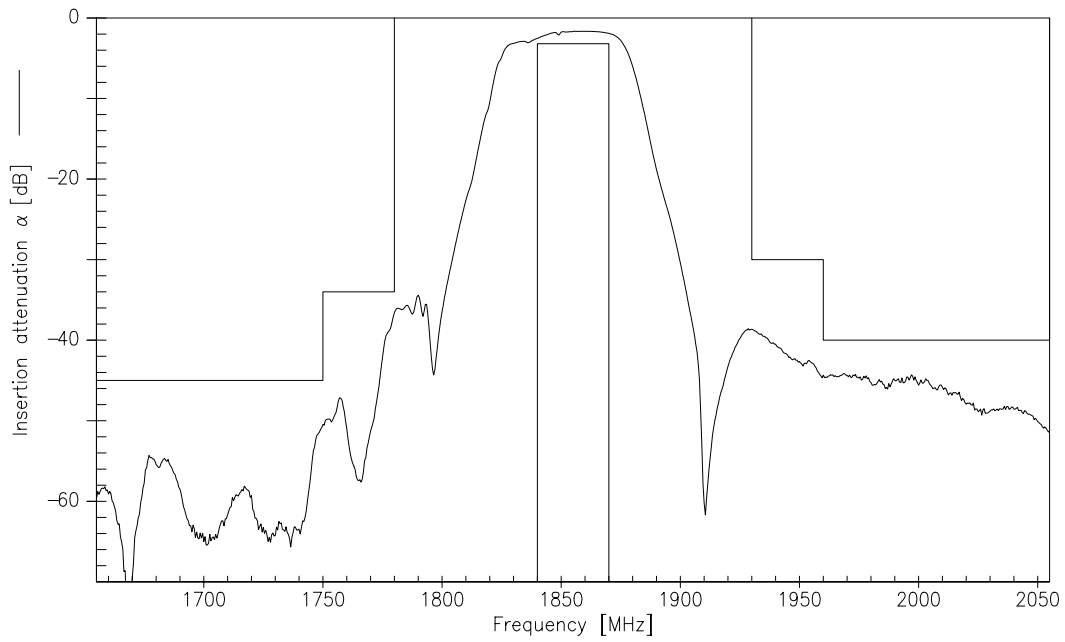
**Characteristics**

Operating temperature range:  $T = -30$  to  $+85^{\circ}\text{C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$  (unbalanced)  
 Terminating load impedance:  $Z_L = 100\ \Omega$  (balanced)

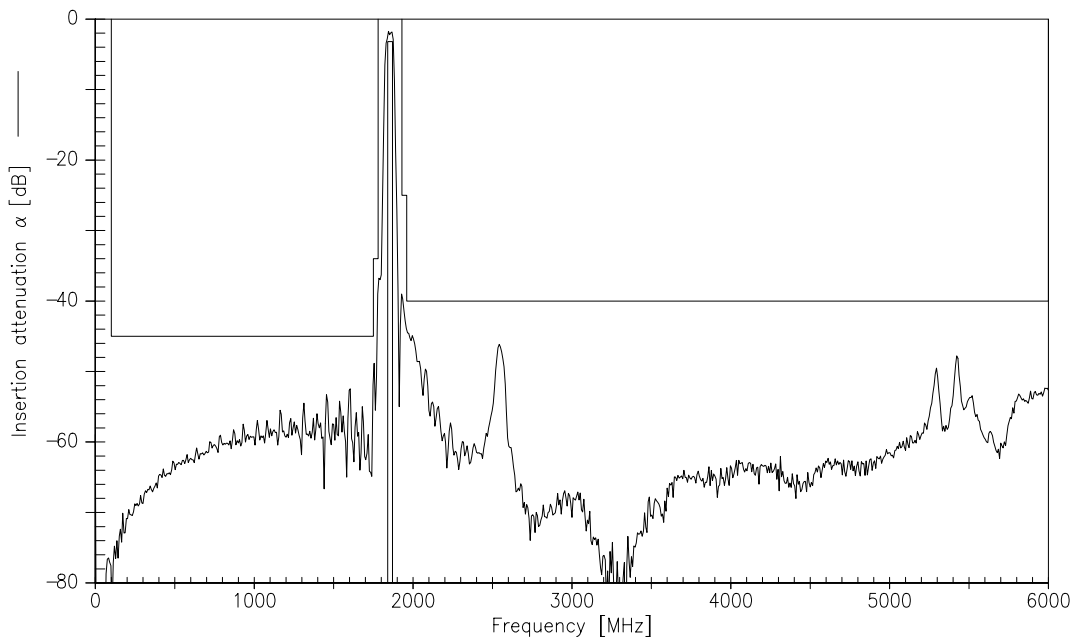
			min.	typ.	max.	
<b>Center frequency</b>	$f_c$		—	1855,0	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$		—	3,0	3,2	dB
		1840,0 ... 1870,0 MHz				
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$		—	1,3	1,5	dB
		1840,0 ... 1870,0 MHz				
<b>Output phase balance</b> ( $\phi(S_{31}) - \phi(S_{21}) + 180^{\circ}$ )			-10	—	10	$^{\circ}$
		1840,0 ... 1870,0 MHz				
<b>Output amplitude balance</b> ( $ S_{31}/S_{21} $ )			-1,0	—	1,0	dB
		1840,0 ... 1870,0 MHz				
<b>Input VSWR</b>			—	2,0	2,1	
		1840,0 ... 1870,0 MHz				
<b>Output VSWR</b>			—	2,2	2,3	
		1840,0 ... 1870,0 MHz				
<b>Attenuation</b>	$\alpha$					
		100,0 ... 1750,0 MHz	45,0	50,0	—	dB
		1750,0 ... 1780,0 MHz	34,0	36,0	—	dB
		1930,0 ... 1960,0 MHz	30,0	38,0	—	dB
		1960,0 ... 6000,0 MHz	40,0	43,0	—	dB



Transfer function (measurement)



Transfer function (wideband measurement)





**SAW Components**

**B7843**

**Low-Loss Filter for Mobile Communication**

**1855,00 MHz**

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.