



# SAW Components

Data Sheet B7843





**SAW Components**

**B7843**

**Low-Loss Filter for Mobile Communication**

**1855,00 MHz**

**Data Sheet**



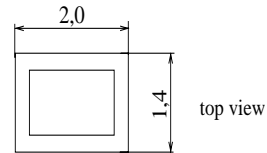
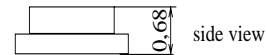
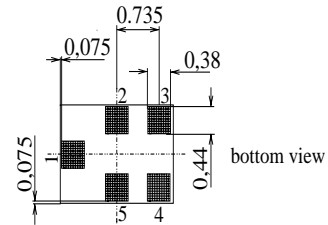
Chip sized SAW package

**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)**

**Terminals**

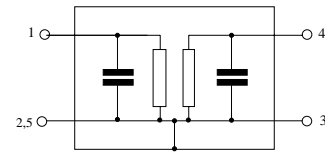
- Ni, gold-plated



Dimensions in mm, approx. weight 0,009 g

**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	



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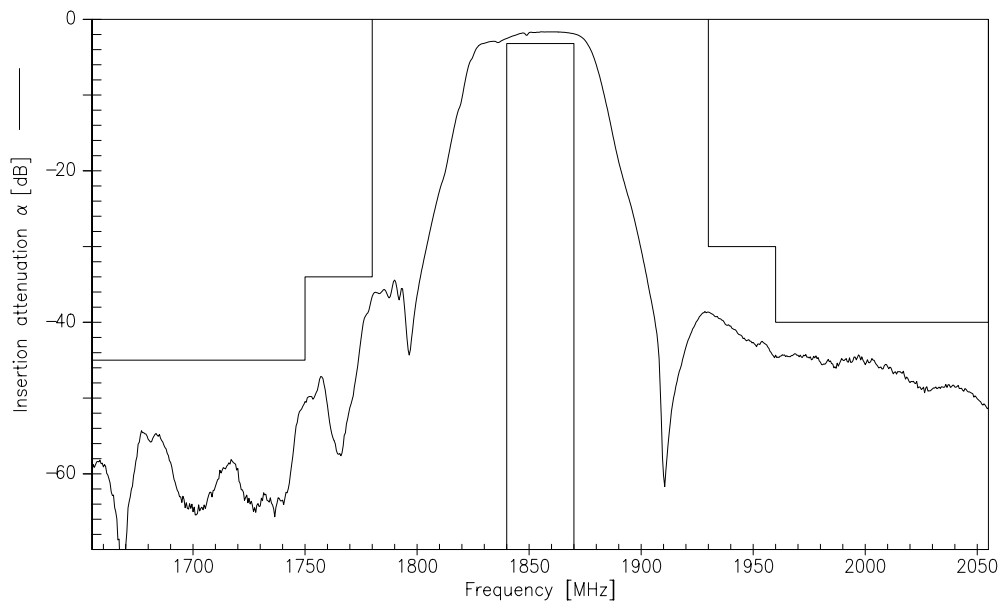
**Characteristics**

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)

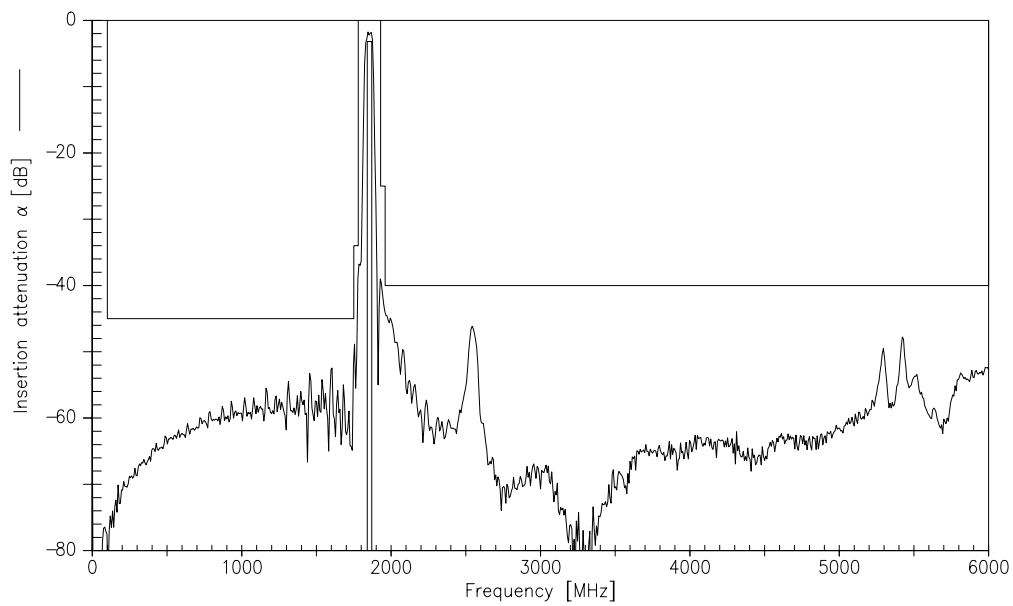
		min.	typ.	max.	
<b>Center frequency</b>	$f_c$	—	1855,0	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$				
1840,0 ... 1870,0 MHz		—	3,0	3,2	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$				
1840,0 ... 1870,0 MHz		—	1,3	1,5	dB
<b>Output phase balance (<math>\phi(S_{31}) - \phi(S_{21}) + 180^{\circ}</math>)</b>					
1840,0 ... 1870,0 MHz		-10	—	10	°
<b>Output amplitude balance (<math> S_{31} / S_{21} </math>)</b>					
1840,0 ... 1870,0 MHz		-1,0	—	1,0	dB
<b>Input VSWR</b>					
1840,0 ... 1870,0 MHz		—	2,0	2,1	
<b>Output VSWR</b>					
1840,0 ... 1870,0 MHz		—	2,2	2,3	
<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)





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