



SAW Components

Data Sheet B7843

Data Sheet

An abstract graphic featuring the word "EPCOS" in large, glowing, 3D letters. The letters are white with a bright, circular highlight in the center of each, giving them a three-dimensional appearance. They are set against a dark, textured background that includes a faint, glowing globe and circuitry patterns, suggesting a high-tech or global theme.



SAW Components

B7843

Low-Loss Filter for Mobile Communication

1855,00 MHz

Data Sheet



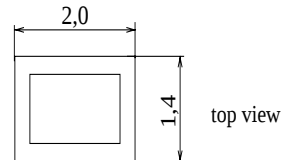
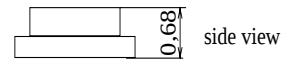
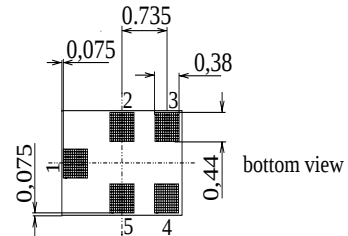
Features

- 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

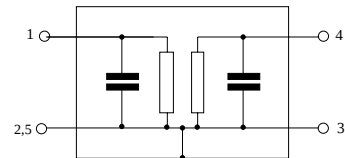
Chip sized SAW package



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	$^{\circ}\text{C}$	CDMA signal
Storage temperature range	T_{stg}	- 40/+ 85	$^{\circ}\text{C}$	
DC voltage	V_{DC}	0	V	
Input power max.	P_{IN}	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.	
Center frequency	f_c		—	1855,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$					
	1840,0 ...1870,0 MHz		—	3,0	3,2	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	1840,0 ...1870,0 MHz		—	1,3	1,5	dB
Output phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^{\circ}$)						
	1840,0 ...1870,0 MHz		-10	—	10	$^{\circ}$
Output amplitude balance ($ S_{31}/S_{21} $)						
	1840,0 ...1870,0 MHz		-1,0	—	1,0	dB
Input VSWR						
	1840,0 ...1870,0 MHz		—	2,0	2,1	
Output VSWR						
	1840,0 ...1870,0 MHz		—	2,2	2,3	
Attenuation	α					
	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



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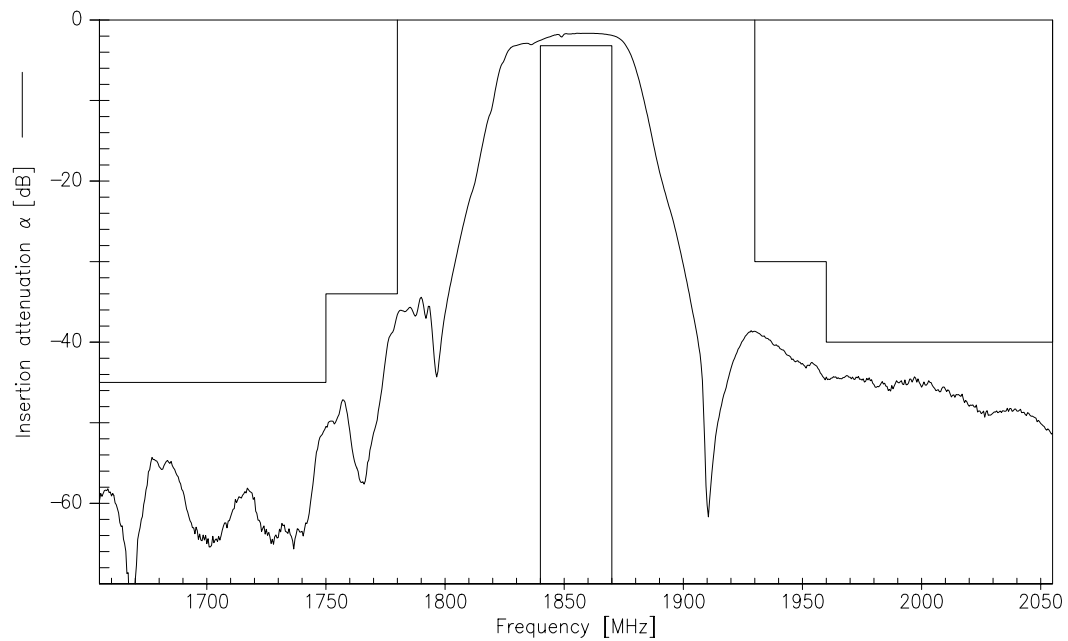
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1855,00 MHz

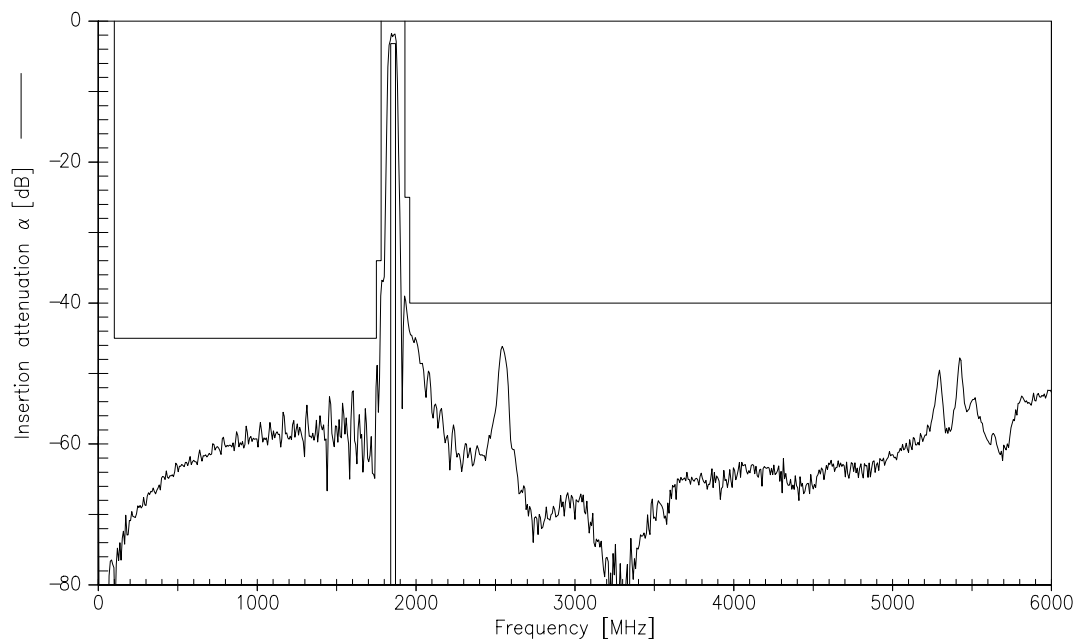
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Transfer function (measurement)



Transfer function (wideband measurement)





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