



SAW Components

Data Sheet B7848

Data Sheet

A large, stylized graphic of a globe is shown, with the word "EPCOS" overlaid in large, glowing, white letters. The globe is rendered with a grid of latitude and longitude lines, and the letters are positioned diagonally across the lower half of the image. The background is dark and textured, giving the impression of a globe or a satellite view of the Earth.



SAW Components

B7848

Low-Loss Filter for Mobile Communication

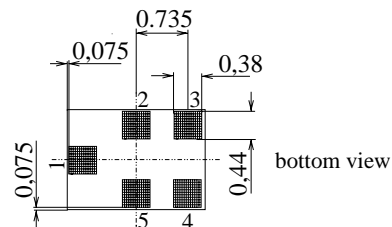
860,5 MHz

Data Sheet

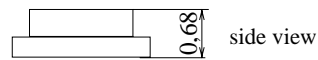
Features

- Low-loss RF filter for iDEN phone, receive path
- Low amplitude ripple
- Usable passband 19,0 MHz
- No matching network required for operation at 50 Ω
- Ceramic package for **Surface Mounted Technology (SMT)**

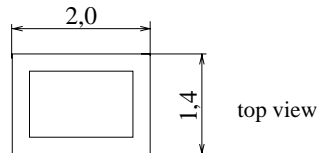
Chip sized SAW package QCS5C



bottom view



side view

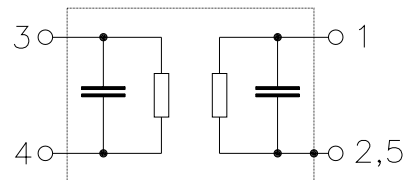


top view

Dimensions in mm, approx. weight 0,009 g

Pin configuration

- | | |
|------|--------------------|
| 1 | Input, unbalanced |
| 4 | Output, unbalanced |
| 2, 5 | Case ground |
| 3 | To be grounded |



Type	Ordering code	Marking and Package according to	Packing according to
B7848	B39861-B7848-C710	C61157-A7-A111	F61074-V8151-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 30 / + 85	$^{\circ}\text{C}$	Machine Model, 10 pulses source impedance 50 Ω
Storage temperature range	T_{stg}	- 40 / + 85	$^{\circ}\text{C}$	
DC voltage	V_{DC}	0	V	
ESD voltage	V_{ESD}	100*	V	
Source power (cw)	P_s	0	dBm	

* - acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses



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Characteristics

Operating temperature range: $T = +25 \pm 2 \text{ }^{\circ}\text{C}$

Terminating source impedance: $Z_S = 50 \text{ } \Omega$

Terminating load impedance: $Z_L = 50 \text{ } \Omega$

		min.	typ.	max.	
Nominal frequency	f_N	—	860,5	—	MHz
Maximum insertion attenuation	α_{\max}				
851,0 ... 870,0 MHz		—	1,9	2,7	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
851,0 ... 870,0 MHz		—	0,5	1,0	dB
Group delay ripple (p-p)	$\Delta\tau$				
851,0 ... 870,0 MHz		—	20	50	ns
Return loss (Input and Output)					
851,0 ... 870,0 MHz		11	14	—	dB
Attenuation	α				
0,100... 806,000MHz		45	55	—	dB
806,000... 825,000MHz		37	51	—	dB
896,000... 902,000MHz		28	42	—	dB
905,825... 924,825MHz		27	51	—	dB
960,650... 979,650MHz		37	57	—	dB
1070,300...1089,300MHz		47	55	—	dB
1089,300... 3000,000MHz		27	39	—	dB



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Characteristics

Operating temperature range: $T = -30$ to $+70$ °C

Terminating source impedance: $Z_S = 50 \Omega$

Terminating load impedance: $Z_L = 50 \Omega$

		min.	typ.	max.	
Nominal frequency	f_N	—	860,5	—	MHz
Maximum insertion attenuation	α_{\max}				
851,0 ... 870,0 MHz		—	2,2	3,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
851,0 ... 870,0 MHz		—	0,6	1,0	dB
Group delay ripple (p-p)	$\Delta\tau$				
851,0 ... 870,0 MHz		—	30	60	ns
Return loss (Input and Output)					
851,0 ... 870,0 MHz		11	13	—	dB
Attenuation	α				
0,100... 806,000MHz		45	55	—	dB
806,000... 825,000MHz		37	51	—	dB
896,000... 902,000MHz		28	42	—	dB
905,825... 924,825MHz		27	51	—	dB
960,650... 979,650MHz		37	57	—	dB
1070,300...1089,300MHz		47	55	—	dB
1089,300... 3000,000MHz		27	39	—	dB



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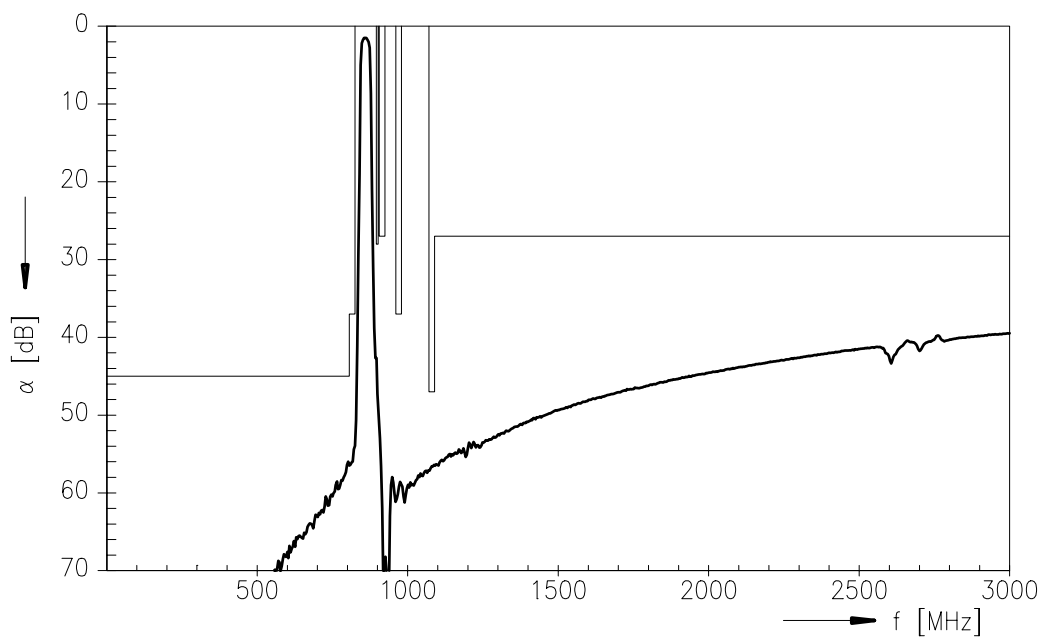
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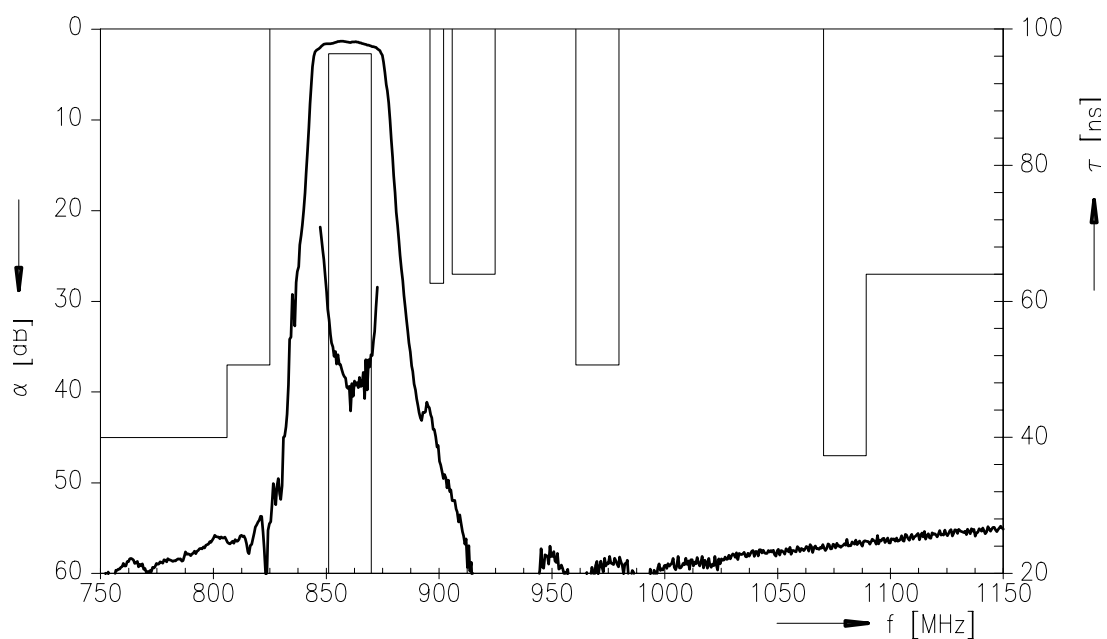
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Transfer function



Transfer function (pass band)





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