



SAW Components

Data Sheet B7848





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B7848

Low-Loss Filter for Mobile Communication

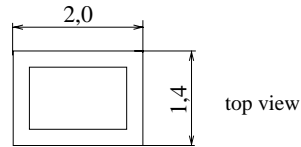
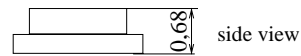
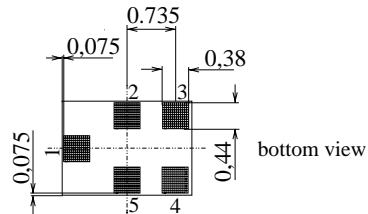
860,5 MHz

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



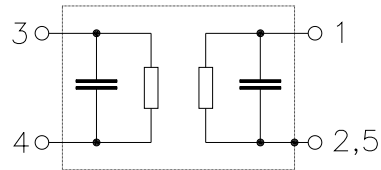
Dimensions in mm, approx. weight 0,009 g

Terminals

- Ni, gold-plated

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	°C	Machine Model, 10 pulses source impedance 50 Ω
Storage temperature range	T_{stg}	- 40 / + 85	°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



Data Sheet

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... 806,000 MHz	45	55	—	dB
	806,000... 825,000 MHz	37	51	—	dB
	896,000... 902,000 MHz	28	42	—	dB
	905,825... 924,825 MHz	27	51	—	dB
	960,650... 979,650 MHz	37	57	—	dB
	1070,300...1089,300MHz	47	55	—	dB
	1089,300... 3000,000MHz	27	39	—	dB



Data Sheet

Characteristics

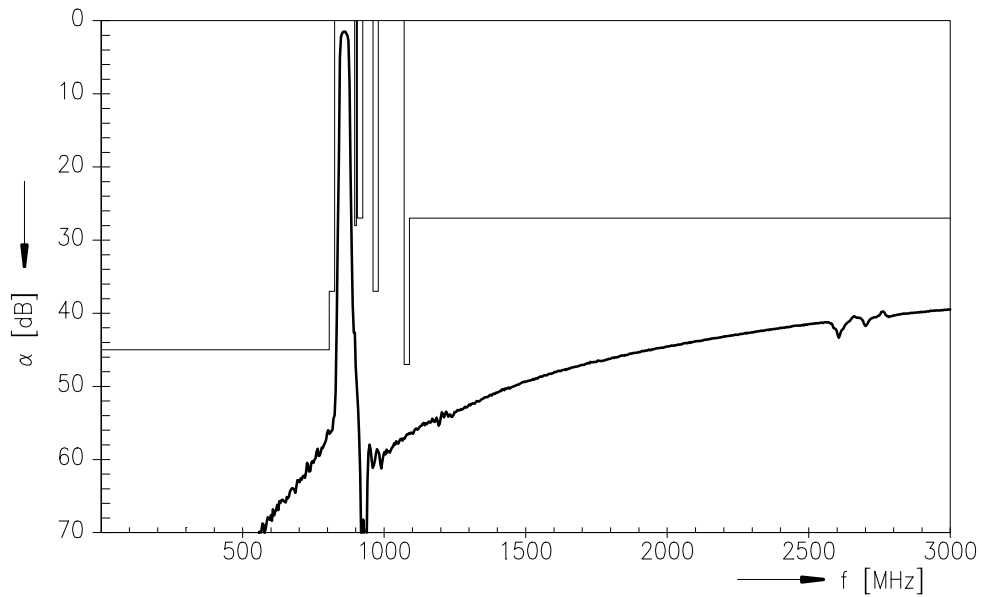
Operating temperature range: $T = -30$ to $+70$ °C
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 50 \Omega$

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

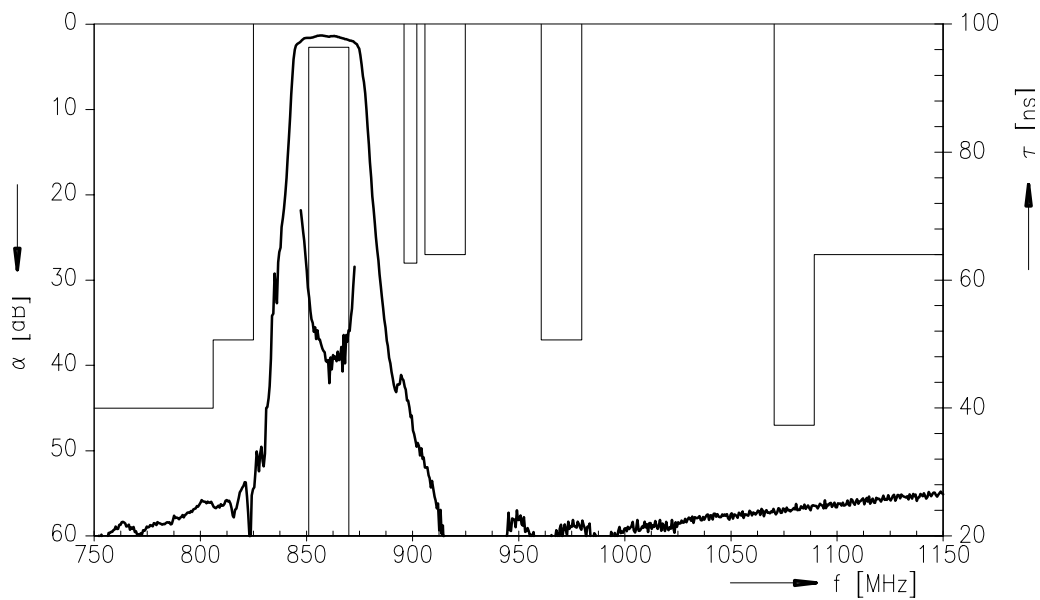


Data Sheet

Transfer function



Transfer function (pass band)





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860,5 MHz

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