EPCOS

SAW Components

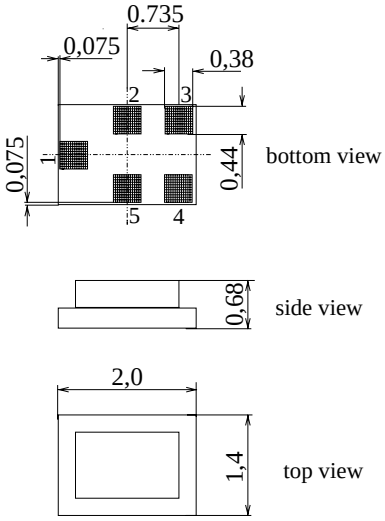
Data Sheet B7848

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 **S**urface **M**ounted **T**echnology (**SMT**)

Chip sized SAW package QCS5C



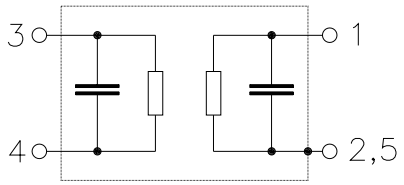
Dimensions in mm, approx. weight 0,009 g

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 **S**ensitive **D**evice (**ESD**)

Maximum ratings

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

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

Characteristics

Operating temperature range: T = +25 ± 2 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

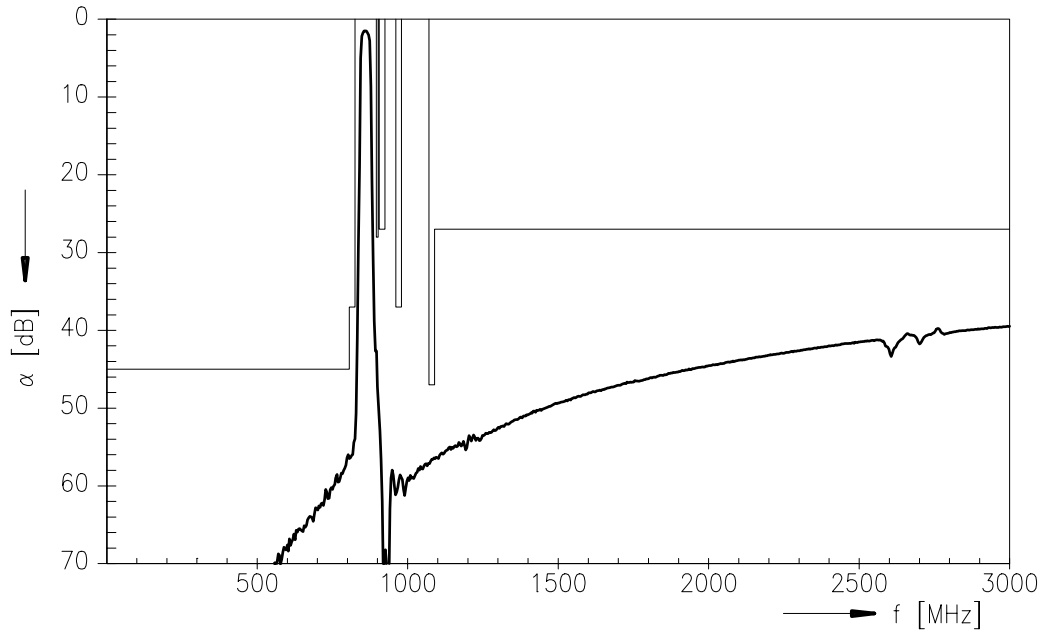
		min.	typ.	max.	
Nominal frequency	f_N	—	860,5	—	MHz
Maximum insertion attenuation	α_{max}				
851,0 ... 870,0 MHz		—	1,9	2,7	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
851,0 ... 870,0 MHz		—	0,5	1,0	dB
Group delay ripple (p-p)	$\Delta\tau$				
851,0 ... 870,0 MHz		—	20	50	ns
Return loss (Input and 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...1089,300 MHz		47	55	—	dB
1089,300... 3000,000 MHz		27	39	—	dB

Characteristics

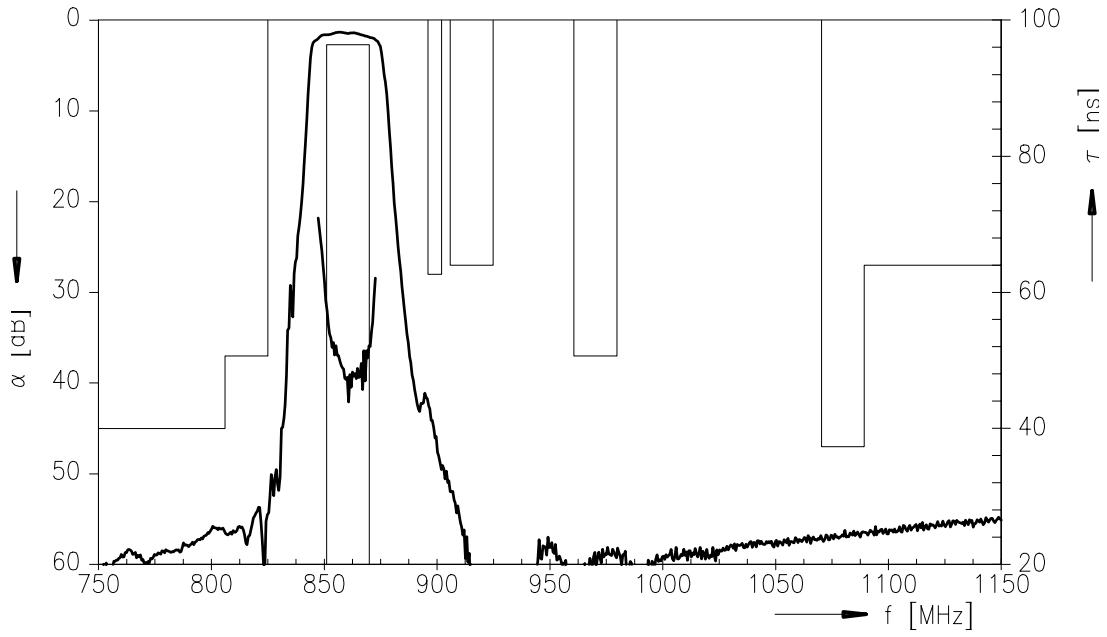
Operating temperature range: T = -30 to +70 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		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... 806,000 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

Transfer function



Transfer function (pass band)



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