EPCOS

SAW Components

Data Sheet B3821



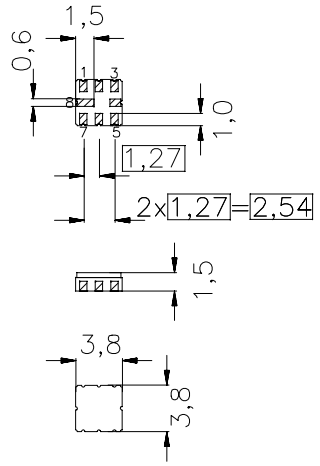
Ceramic package QCC8B

Features

- Low-loss filter for TETRA
- Usable bandwidth 19 MHz
- No matching required for operation at 50 Ω
- Package for Surface Mounted Technology (SMT)
- Hermetically sealed ceramic package

Terminals

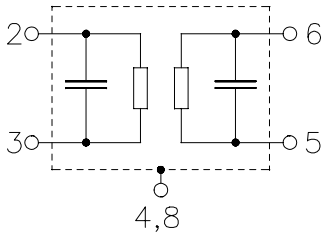
- Gold-plated



typ. Dimensions in mm, approx. weight 0,07 g

Pin configuration

2	Input
6	Output
1, 3, 4, 5, 7, 8	To be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B3821	B39861-B3821-Z810	C61157-A7-A46	F61074-V8037-Z000

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

Maximum ratings

Operable temperature range	T_A	-40 / +85	˚C	
Storage temperature range	T_{stg}	-40 / +85	˚C	
DC voltage	V_{DC}	0	V	
Input power max.	P_{IN}	15 ,0	dBm	source impedance 50 Ω CW for min. 10 000 h, 85 ˚C

Characteristics

Operating temperature range: T_A = +15 ... +35 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

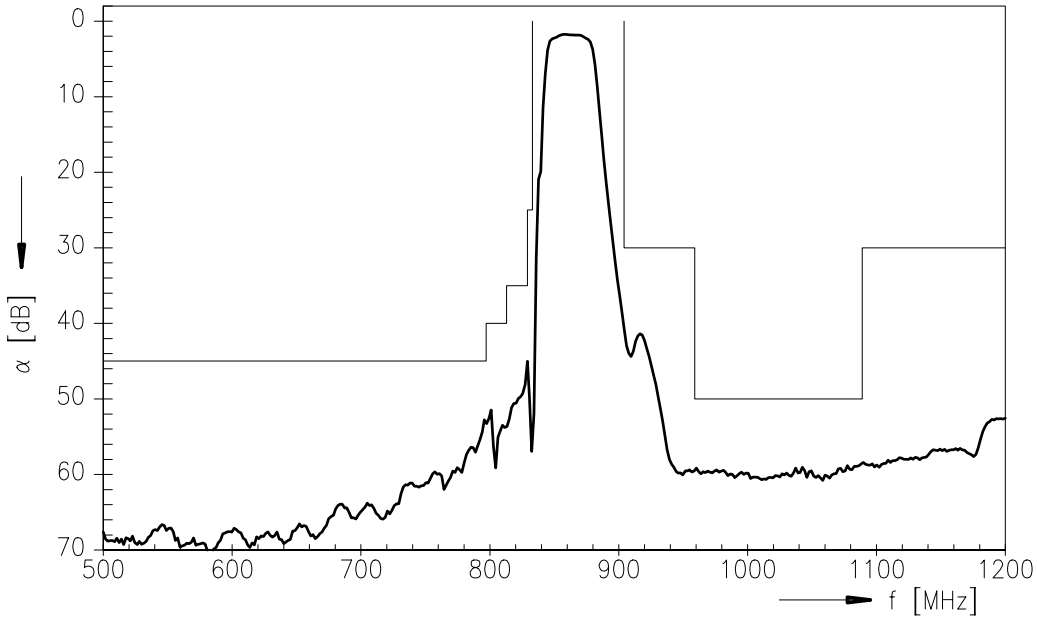
		min.	typ.	max.	
Nominal frequency	f_N	—	860,5	—	MHz
Maximum insertion attenuation	α_{max}				
851,0 MHz ... 870,0 MHz		—	2,2	2,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
851,0 MHz ... 870,0 MHz		—	0,45	0,7	dB
Input and output return loss					
851,0 MHz ... 870,0 MHz		12	16	—	dB
Absolute attenuation	α_{abs}				
0,1 MHz ... 797,0 MHz		45	55	—	dB
797,0 MHz ... 813,0 MHz		40	50	—	dB
813,0 MHz ... 829,0 MHz		35	43	—	dB
829,0 MHz ... 833,0 MHz		25	40	—	dB
904,0 MHz ... 959,0 MHz		30	40	—	dB
959,0 MHz ... 1089,0 MHz		50	60	—	dB
1089,0 MHz ... 2000,0 MHz		30	42	—	dB
Temperature coefficient of frequency	TC_f	—	– 36	—	ppm/K

Characteristics

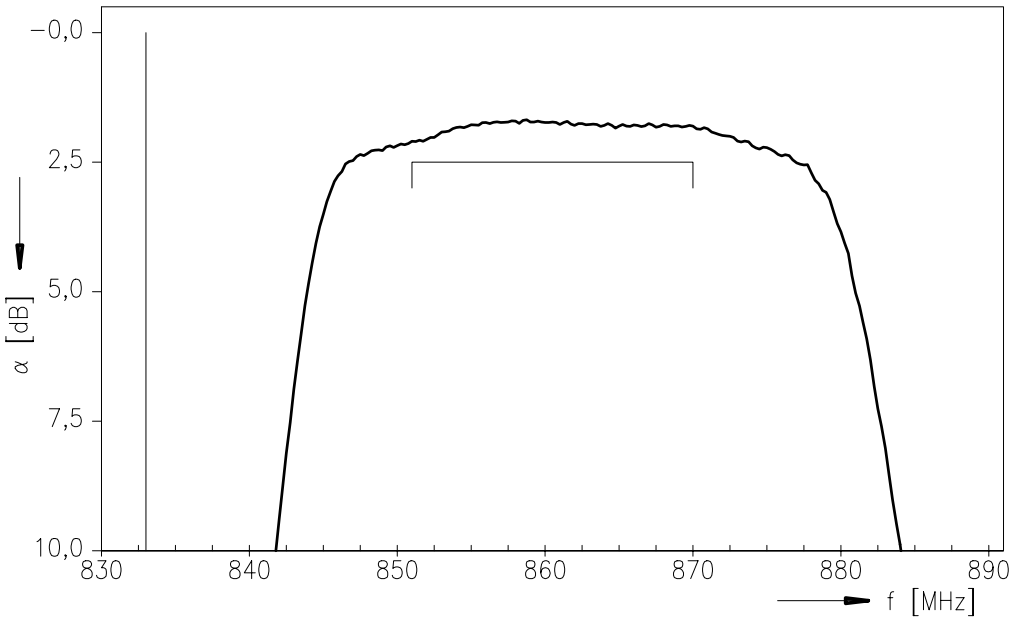
Operating temperature range: T_A = -30 ... +70 ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Nominal frequency	f_N	—	860,5	—	MHz
Maximum insertion attenuation	α_{max}				
851,0 MHz ... 870,0 MHz		—	2,3	2,7	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
851,0 MHz ... 870,0 MHz		—	0,55	0,8	dB
Input and output return loss					
851,0 MHz ... 870,0 MHz		12	16	—	dB
Absolute attenuation	α_{abs}				
0,1 MHz ... 797,0 MHz		45	55	—	dB
797,0 MHz ... 813,0 MHz		40	50	—	dB
813,0 MHz ... 829,0 MHz		35	43	—	dB
829,0 MHz ... 833,0 MHz		19	40	—	dB
904,0 MHz ... 959,0 MHz		30	40	—	dB
959,0 MHz ... 1089,0 MHz		50	60	—	dB
1089,0 MHz ... 2000,0 MHz		30	42	—	dB
Temperature coefficient of frequency	TC_f	—	– 36	—	ppm/K

Transfer function (+15 ˚C ... +35 ˚C)



Transfer function (pass band; +15 ˚C ... +35 ˚C)



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