EPCOS

SAW Components

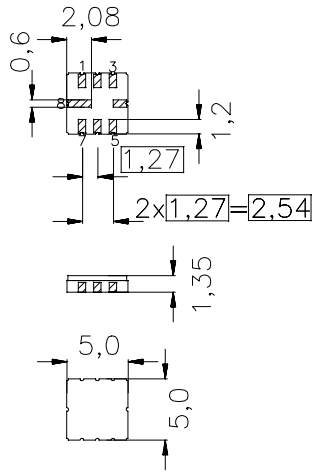
Data Sheet B3691

Data Sheet

Ceramic SMD package QCC8C

Features

- Low-loss filter for TETRA
- Usable bandwidth 20 MHz
- No matching required for operation at 50 Ω
- Package for Surface Mounted Technology (SMT)



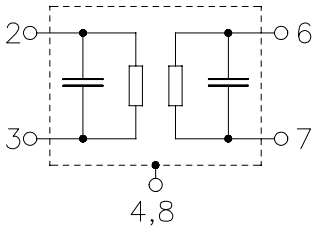
Terminals

- Gold plated

Dimensions in mm, approx. weight 0,10 g

Pin configuration

2	Input
3	Input ground
6	Output
7	Output ground
1, 5	Ground
4, 8	Case ground



Type	Ordering code	Marking and Package according to	Packing according to
B3691	B39421-B3691-U310	C61157-A7-A56	F61074-V8070-Z000

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

Maximum ratings

Operable temperature range	T	-40/ +85	˚C
Storage temperature range	T_{stg}	-40/ +85	˚C
DC voltage	V_{DC}	0	V
Source power	P_s	10	dBm

Characteristics

Operating temperature: T = +25 °C
Terminating source impedance: 50 Ω
Terminating load impedance: 50 Ω

		min.	typ.	max.	
Nominal frequency	f_N	—	420,0	—	MHz
Maximum insertion attenuation	α_{max}	—	2,0	2,3	dB
410,0 MHz ... 430,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$				
410,0 MHz ... 430,0 MHz		—	0,65	0,9	dB
Absolute attenuation	α_{abs}				
0,1 MHz ... 300,0 MHz		30	35	—	dB
300,0 MHz ... 365,0 MHz		24	30	—	dB
365,0 MHz ... 380,0 MHz		22	24,5	—	dB
464,825 MHz		10	23	—	dB
519,65 MHz ... 539,65 MHz		28	32	—	dB
629,3 MHz ... 649,3 MHz		24	28	—	dB
649,3 MHz ... 1000,0 MHz		26	30	—	dB
Return loss (Input)					
410,0 MHz ... 415,0 MHz		8,0	9,0	—	dB
415,0 MHz ... 430,0 MHz		10,0	11,0	—	dB
Return loss (Output)					
410,0 MHz ... 430,0 MHz		10,0	11,0	—	dB
Temperature coefficient of frequency	TC_f	—	– 70	—	ppm/K

Characteristics

Operating temperature: T = +5 ... +45 °C
Terminating source impedance: 50 Ω
Terminating load impedance: 50 Ω

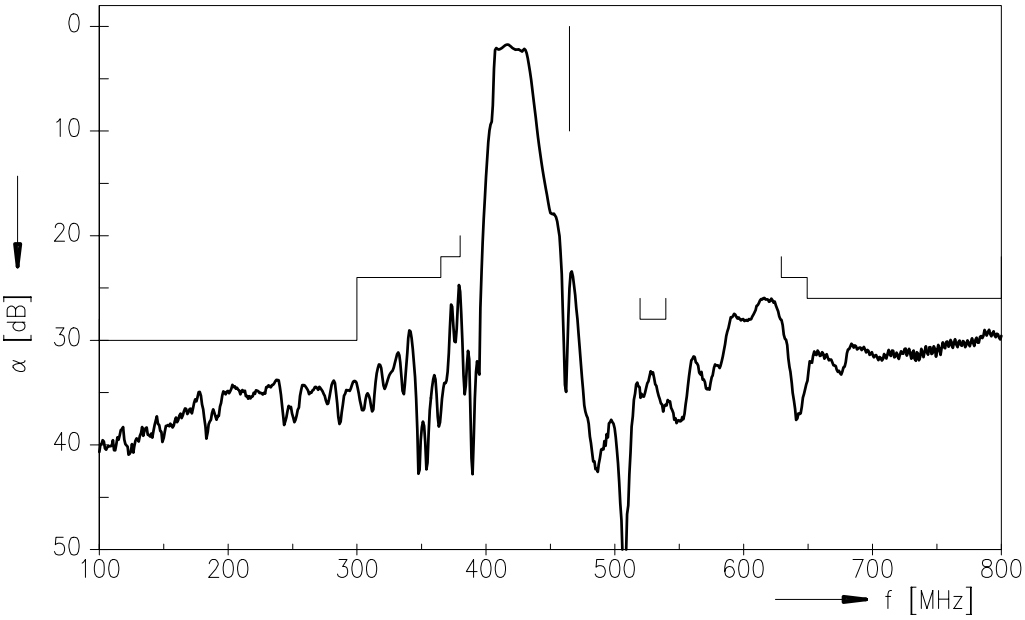
		min.	typ.	max.	
Nominal frequency	f_N	—	420,0	—	MHz
Maximum insertion attenuation	α_{max}	—	2,1	2,5	dB
410,0 MHz ... 430,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$				
410,0 MHz ... 430,0 MHz		—	0,65	1,0	dB
Absolute attenuation	α_{abs}				
0,1 MHz ... 300,0 MHz		30	35	—	dB
300,0 MHz ... 365,0 MHz		24	30	—	dB
365,0 MHz ... 380,0 MHz		22	24,5	—	dB
464,825 MHz		10	23	—	dB
519,65 MHz ... 539,65 MHz		28	32	—	dB
629,3 MHz ... 649,3 MHz		24	28	—	dB
649,3 MHz ... 1000,0 MHz		26	30	—	dB
Return loss (Input)					
410,0 MHz ... 415,0 MHz		8,0	9,0	—	dB
415,0 MHz ... 430,0 MHz		10,0	11,0	—	dB
Return loss (Output)					
410,0 MHz ... 430,0 MHz		10,0	11,0	—	dB
Temperature coefficient of frequency	TC_f	—	– 70	—	ppm/K

Characteristics

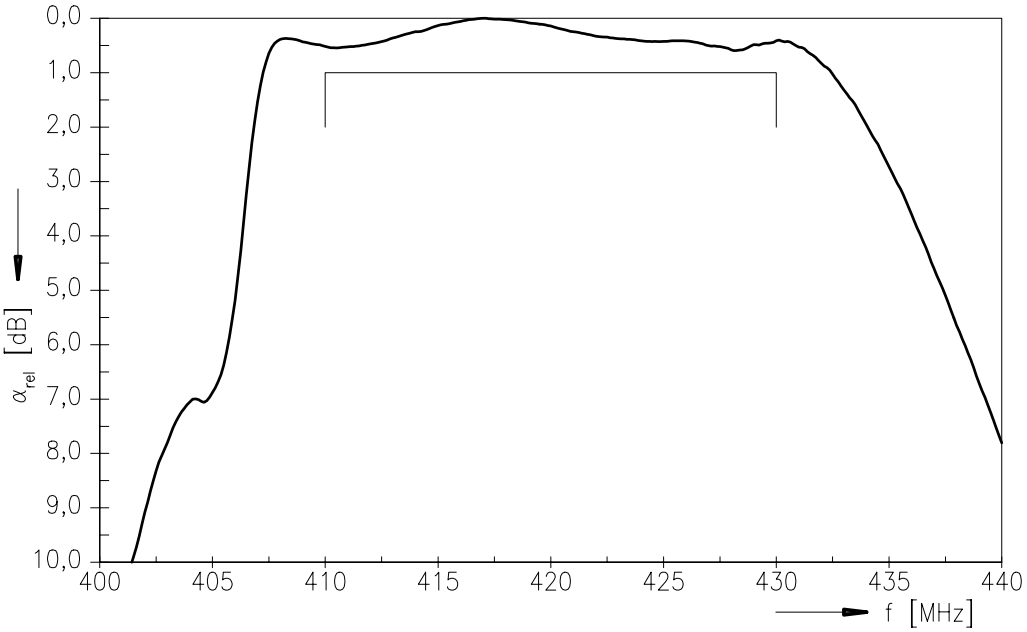
Operating temperature: T = -30 ... +80 ˚C
Terminating source impedance: 50 Ω
Terminating load impedance: 50 Ω

		min.	typ.	max.	
Nominal frequency	f_N	—	420,0	—	MHz
Maximum insertion attenuation	α_{max}	—	2,2	2,7	dB
410,0 MHz ... 430,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$				
410,0 MHz ... 430,0 MHz		—	0,7	1,0	dB
Absolute attenuation	α_{abs}				
0,1 MHz ... 300,0 MHz		30	35	—	dB
300,0 MHz ... 365,0 MHz		24	30	—	dB
365,0 MHz ... 380,0 MHz		22	24,5	—	dB
464,825 MHz		10	23	—	dB
519,65 MHz ... 539,65 MHz		28	32	—	dB
629,3 MHz ... 649,3 MHz		24	28	—	dB
649,3 MHz ... 1000,0 MHz		26	30	—	dB
Return loss (Input)					
410,0 MHz ... 415,0 MHz		8,0	9,0	—	dB
415,0 MHz ... 430,0 MHz		10,0	11,0	—	dB
Return loss (Output)					
410,0 MHz ... 430,0 MHz		10,0	11,0	—	dB
Temperature coefficient of frequency	TC_f	—	– 70	—	ppm/K

Transfer function



Normalized Transfer function (pass band)



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