EPCOS

SAW Components

Data Sheet B3684

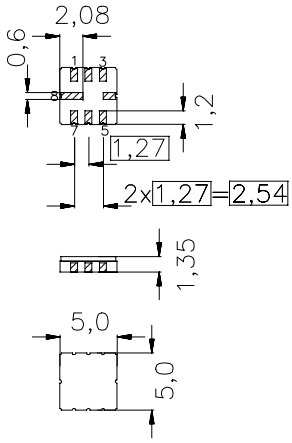
Ceramic package QCC8C

Features

- Low-loss filter (WBN) for Trunked Radio
- Usable bandwidth 5 MHz
- No matching required for operation at 50 Ω
- Package for Surface Mounted Technology (SMT)
- Hermetically sealed ceramic package

Terminals

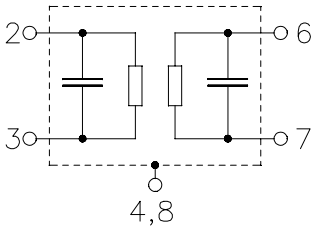
- Gold-plated



Dimensions in mm, approx. weight 0,1 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
B3684	B39391-B3684-U310	C61157-A7-A56	F61064-V8070-Z000

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

Maximum ratings

Operable temperature range	T	– 25/+ 75	˚C	
Storage temperature range	T_{stg}	– 40/+ 85	˚C	
DC voltage	V_{DC}	0	V	
Source power	P_S	10	dBm	source impedance 50 Ω

Characteristics

Operating temperature: T = +15 ... +35 ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

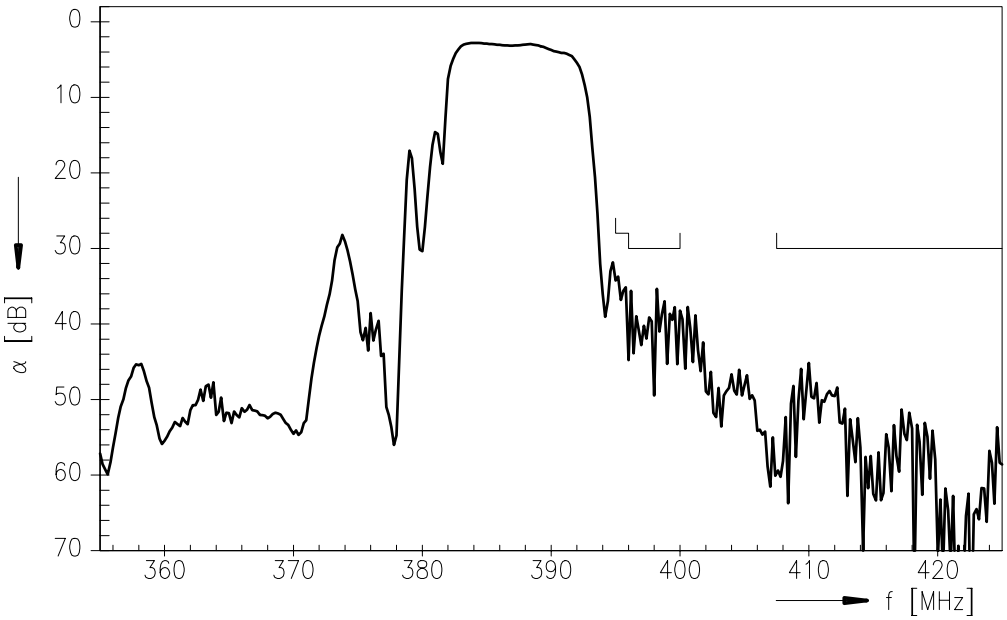
		min.	typ.	max.	
Nominal frequency	f_N	—	387,5	—	MHz
Maximum insertion attenuation	α_{max}				
385,0 MHz ... 390,0 MHz		—	3,2	3,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
385,0 MHz ... 390,0 MHz		—	0,9	1,4	dB
Return loss (Input and Output)					
385,0 MHz ... 390,0 MHz		11,0	12,5	—	dB
Group delay	τ				
385,0 MHz ... 390,0 MHz		—	140	180	ns
Deviation from lin. phase (in 1 MHz bandwidth)	$\Delta\varphi$				
385,0 MHz ... 390,0 MHz		—	0,9	5	°
Absolute attenuation	α_{abs}				
45,0 MHz ... 81,5 MHz		40	70	—	dB
222,0 MHz ... 300,0 MHz		40	60	—	dB
303,5 MHz ... 345,0 MHz		20	45	—	dB
395,0 MHz ... 396,0 MHz		28	30	—	dB
396,0 MHz ... 400,0 MHz		30	32	—	dB
407,5 MHz ... 475,0 MHz		30	40	—	dB
475,0 MHz ... 1025,0 MHz		40	45	—	dB
1025,0 MHz ... 2000,0 MHz		20	30	—	dB
2000,0 MHz ... 4000,0 MHz		15	17	—	dB
Temperature coefficient of frequency	TC_f	—	– 36	—	ppm/K

Characteristics

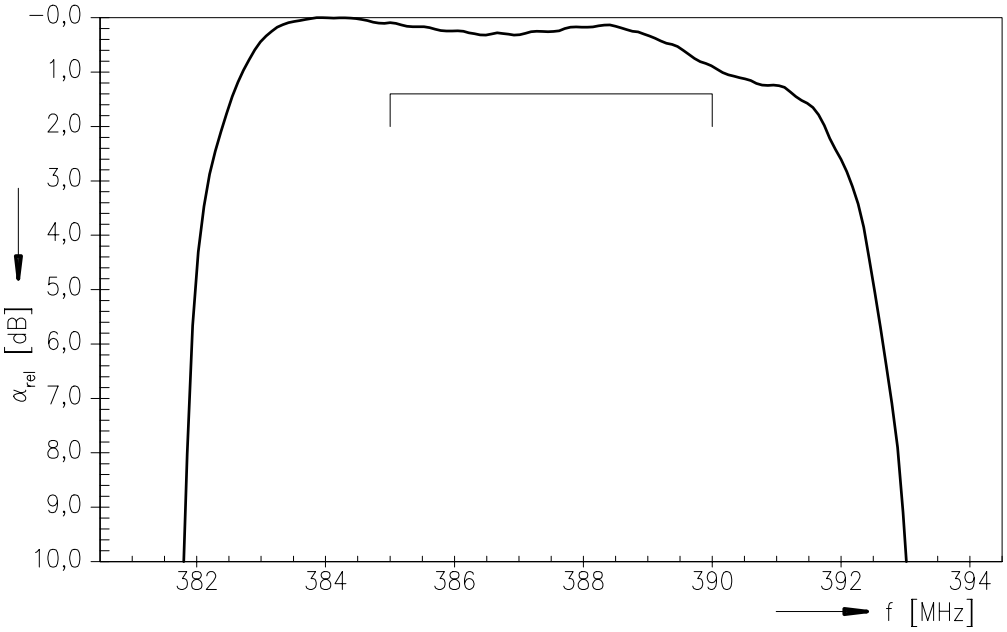
Operating temperature: T = -25 ... +75 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Nominal frequency	f_N	—	387,5	—	MHz
Maximum insertion attenuation	α_{max}				
385,0 MHz ... 390,0 MHz		—	3,5	4,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
385,0 MHz ... 390,0 MHz		—	1,1	2,0	dB
Return loss (Input and Output)					
385,0 MHz ... 390,0 MHz		11,0	12,5	—	dB
Group delay	τ				
385,0 MHz ... 390,0 MHz		—	140	180	ns
Deviation from lin. phase (in 1 MHz bandwidth)	$\Delta\varphi$				
385,0 MHz ... 390,0 MHz		—	1,3	5	°
Temperature coefficient of frequency	TC_f	—	– 36	—	ppm/K

Transfer function



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



Published by EPCOS AG
Surface Acoustic Wave Components Division, OFW E NK
P.O. Box 80 17 09, D-81617 München

© EPCOS AG 1999. All Rights Reserved.

As far as patents or other rights of third parties are concerned, liability is only assumed for components per se, not for applications, processes and circuits implemented within components or assemblies.

The information describes the type of component and shall not be considered as assured characteristics.
Terms of delivery and rights to change design reserved.

For questions on technology, prices and delivery please contact the sales offices of EPCOS AG or the international representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our sales offices.