EPCOS

SAW Components

Data Sheet B3683

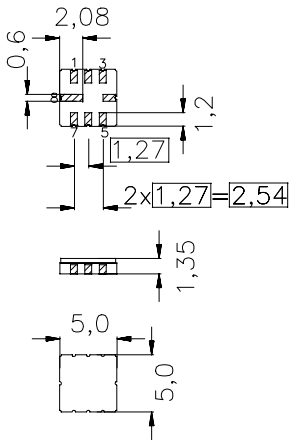
Ceramic package QCC8C

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

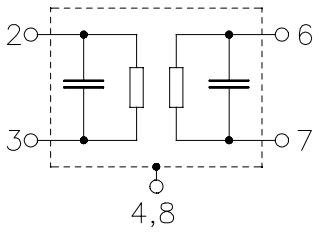
- Gold-plated



typ. 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
B3683	B39381-B3683-U310	C61157-A7-A56	F61074-V8070-Z000

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

Maximum ratings

Operable temperature range	T_A	-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 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	—	382,5	—	MHz
Maximum insertion attenuation	α_{max}				
380,0 MHz ... 385,0 MHz		—	3,3	3,7	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
380,0 MHz ... 385,0 MHz		—	0,8	1,4	dB
Return loss (Input and Output)					
380,0 MHz ... 385,0 MHz		11,0	12,5	—	dB
Group delay	τ				
380,0 MHz ... 385,0 MHz		—	140	180	ns
Deviation from lin. phase (in 1 MHz bandwidth)	$\Delta\varphi$				
380,0 MHz ... 385,0 MHz		—	0,9	5	°
Absolute attenuation	α_{abs}				
45,0 MHz ... 81,5 MHz		40	70	—	dB
217,0 MHz ... 295,0 MHz		40	55	—	dB
298,5 MHz ... 340,0 MHz		20	45	—	dB
390,0 MHz ... 395,0 MHz		30	34	—	dB
402,5 MHz ... 470,0 MHz		30	42	—	dB
470,0 MHz ... 1015,0 MHz		40	45	—	dB
1015,0 MHz ... 2000,0 MHz		20	45	—	dB
2000,0 MHz ... 4000,0 MHz		5	10	—	dB
Temperature coefficient of frequency	TC_f	—	– 36	—	ppm/K

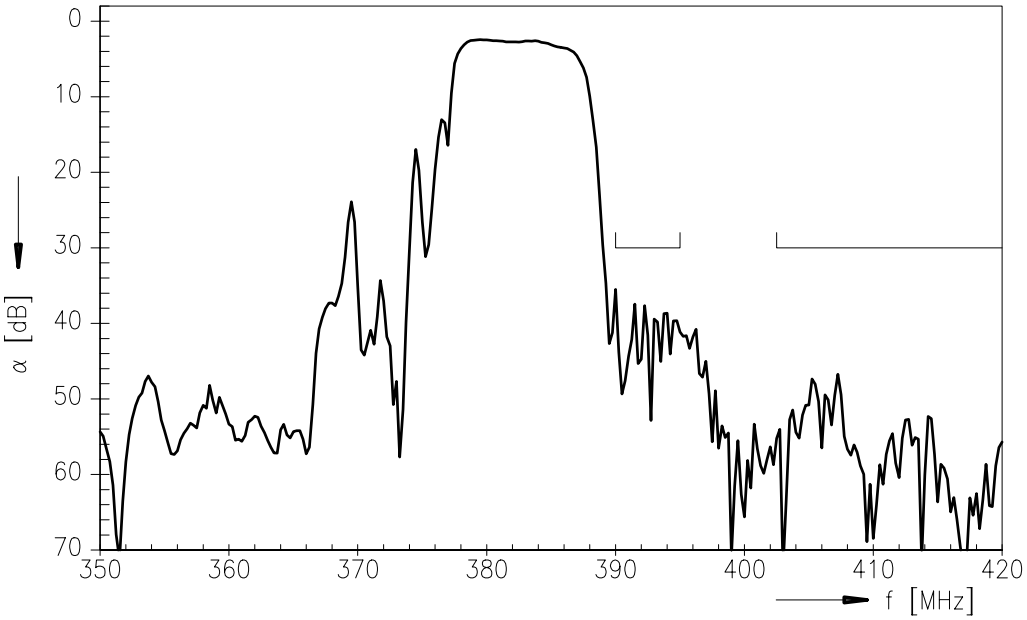
Data Sheet

Characteristics

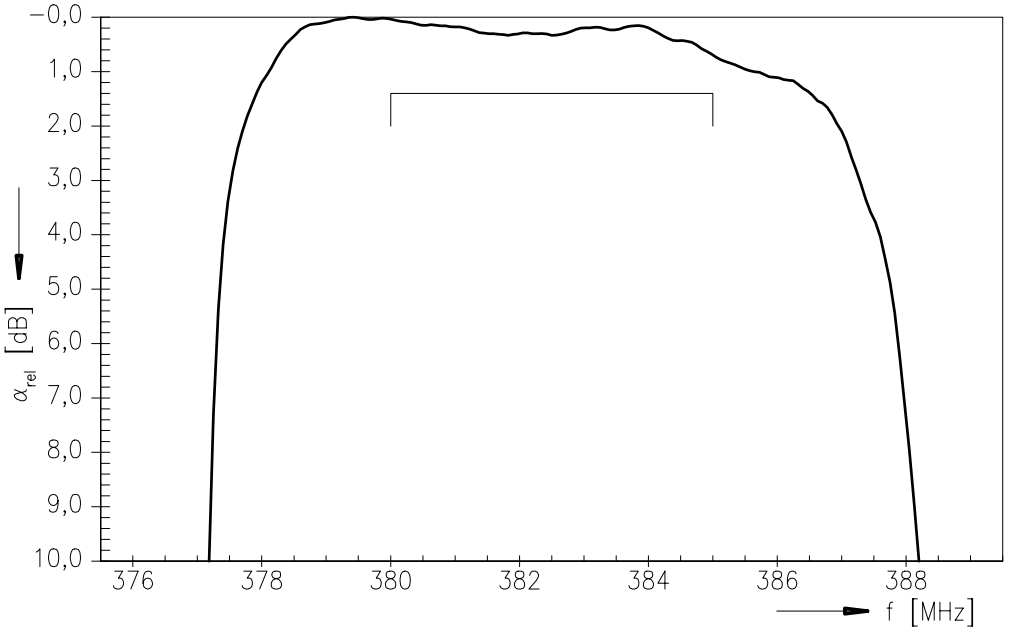
Operating temperature range: T_A = -25 ... +75 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Nominal frequency	f_N	—	382,5	—	MHz
Maximum insertion attenuation	α_{max}				
380,0 MHz ... 385,0 MHz		—	3,5	4,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
380,0 MHz ... 385,0 MHz		—	1,1	2,0	dB
Return loss (Input and Output)					
380,0 MHz ... 385,0 MHz		11,0	12,5	—	dB
Group delay	τ				
380,0 MHz ... 385,0 MHz		—	140	180	ns
Deviation from lin. phase (in 1 MHz bandwidth)	$\Delta\varphi$				
380,0 MHz ... 385,0 MHz		—	1,1	5	°
Temperature coefficient of frequency	TC_f	—	– 36	—	ppm/K

Transfer function



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



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