



SAW Components

Data Sheet B3683





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B3683

Low-Loss Filter

382,5 MHz

Data Sheet

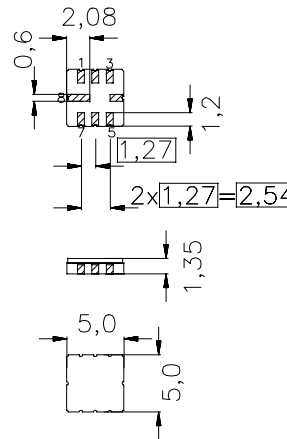
Ceramic package QCC8C

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

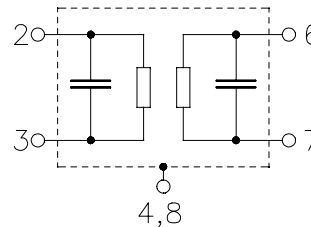
- Gold-plated



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 Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T_A	-25 / +75	°C	source impedance 50 Ω
Storage temperature range	T_{stg}	-40 / +85	°C	
DC voltage	V_{DC}	0	V	
Source power	P_s	10	dBm	


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Characteristics

Operating temperature range: $T_A = +15 \dots +35 \text{ }^\circ\text{C}$
 Terminating source impedance: $Z_S = 50 \text{ }\Omega$
 Terminating load impedance: $Z_L = 50 \text{ }\Omega$

		min.	typ.	max.	
Nominal frequency	f_N	—	382,5	—	MHz
Maximum insertion attenuation 380,0 MHz ... 385,0 MHz	α_{\max}	—	3,3	3,7	dB
Amplitude ripple (p-p) 380,0 MHz ... 385,0 MHz	$\Delta\alpha$	—	0,8	1,4	dB
Return loss (Input and Output) 380,0 MHz ... 385,0 MHz		11,0	12,5	—	dB
Group delay 380,0 MHz ... 385,0 MHz	τ	—	140	180	ns
Deviation from lin. phase (in 1 MHz bandwidth) 380,0 MHz ... 385,0 MHz	$\Delta\varphi$	—	0,9	5	$^\circ$
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



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 Terminating source impedance: $Z_S = 50 \text{ } \Omega$
 Terminating load impedance: $Z_L = 50 \text{ } \Omega$

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



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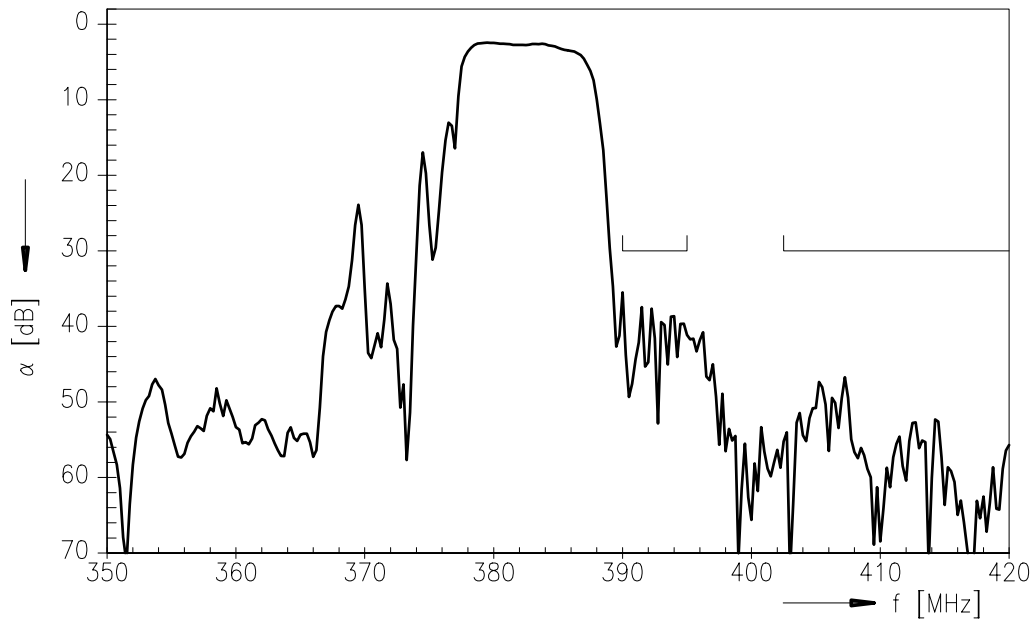
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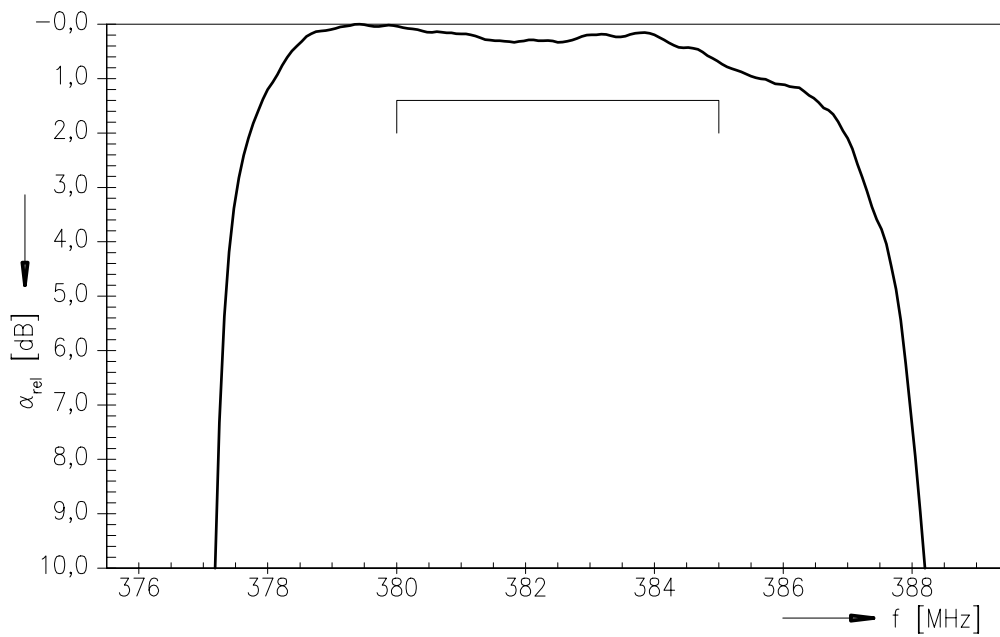
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Transfer function



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





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