



SAW Components

Data Sheet B3680

Data Sheet

An abstract graphic featuring the word "EPCOS" in large, glowing, 3D letters. The letters are white with a blue glow and are positioned diagonally across the frame. In the background, there is a faint, stylized globe with circuitry patterns, suggesting a global network or technological theme. The overall color scheme is dark with blue and white highlights.



SAW Components

B3680

Low-Loss Filter

352,0 MHz

Data Sheet

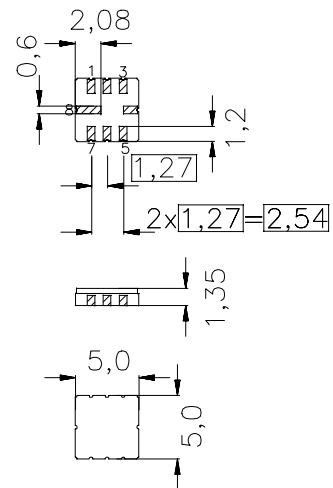
Ceramic package QCC8C

Features

- Low-loss IF filter for Wireless LAN
- Low insertion attenuation
- Low amplitude ripple
- Usable passband 12 MHz
- Balanced or unbalanced operation
- Hermetically sealed ceramic package
- Package for Surface Mounted Technology (SMT)

Terminals

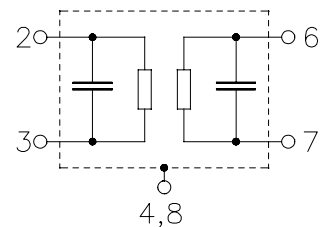
- Gold plated



typ. Dimensions in mm, approx. weight 0,1 g

Pin configuration

2, 3	Input, input ground or bal. input
6, 7	Output, outp. ground or bal. outp.
4, 8	Case ground
1, 5	Ground



Type	Ordering code	Marking and Package according to	Packing according to
B3680	B39351-B3680-U310	C61157-A7-A56	F61074-V8070-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T_A	-25 / +85	°C
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:

$T_A = 25\text{ °C}$

Terminating source impedance:

$Z_S = 50\ \Omega$ and matching network

Terminating load impedance:

$Z_L = 50\ \Omega$ and matching network

		min.	typ.	max.	
Nominal frequency	f_N	—	352,0	—	MHz
Minimum insertion attenuation	$\alpha_{\min}$	—	2,7	3,0	dB
Amplitude ripple in passband (p-p) 346,0 358,0 MHz	$\Delta\alpha$	—	1,4	2,5	dB
Group delay ripple (p-p) 346,0 358,0 MHz	$\Delta\tau$	—	40	100	ns
346,5 358,0 MHz		—	40	80	ns
Pass bandwidth $\alpha_{\text{rel}} \leq 3\text{dB}$	$B_{3\text{dB}}$	15,0	15,6	—	MHz
Relative attenuation (relative to $\alpha_{\min}$)	α_{rel}				
0,3 333,0 MHz		45	54	—	dB
333,0 341,0 MHz		11	34	—	dB
363,0 366,0 MHz		11	19	—	dB
366,0 371,0 MHz		22	25	—	dB
371,0 374,0 MHz		25	35	—	dB
374,0 392,0 MHz		34	36	—	dB
392,0 400,0 MHz		45	54	—	dB
Temperature coefficient of frequency	TC_f	—	– 70	—	ppm/K



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Characteristics

Operating temperature range:

$$T_A = 0 \dots 85 \text{ }^{\circ}\text{C}$$

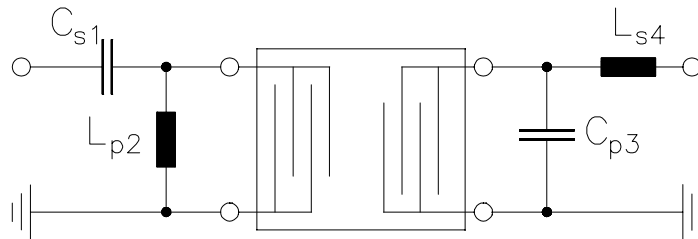
Terminating source impedance:

$$Z_S = 50 \text{ } \Omega \text{ and matching network}$$

Terminating load impedance:

$$Z_L = 50 \text{ } \Omega \text{ and matching network}$$

		min.	typ.	max.	
Nominal frequency	f_N	—	352,0	—	MHz
Minimum insertion attenuation	$\alpha_{\min}$	—	2,7	3,5	dB
Amplitude ripple in passband (p-p) 346,0 358,0 MHz	$\Delta\alpha$	—	1,4	3,0	dB
Group delay ripple (p-p) 346,0 358,0 MHz	$\Delta\tau$	—	40	170	ns
346,5 358,0 MHz		—	40	120	ns
Pass bandwidth $\alpha_{\text{rel}} \leq 3\text{dB}$	$B_{3\text{dB}}$	14,0	15,6	—	MHz
Relative attenuation (relative to $\alpha_{\min}$)	α_{rel}				
0,3 333,0 MHz		45	54	—	dB
333,0 341,0 MHz		11	34	—	dB
363,0 366,0 MHz		11	19	—	dB
366,0 371,0 MHz		22	25	—	dB
371,0 374,0 MHz		25	35	—	dB
374,0 392,0 MHz		34	36	—	dB
392,0 400,0 MHz		45	54	—	dB
Temperature coefficient of frequency	TC_f	—	– 70	—	ppm/K

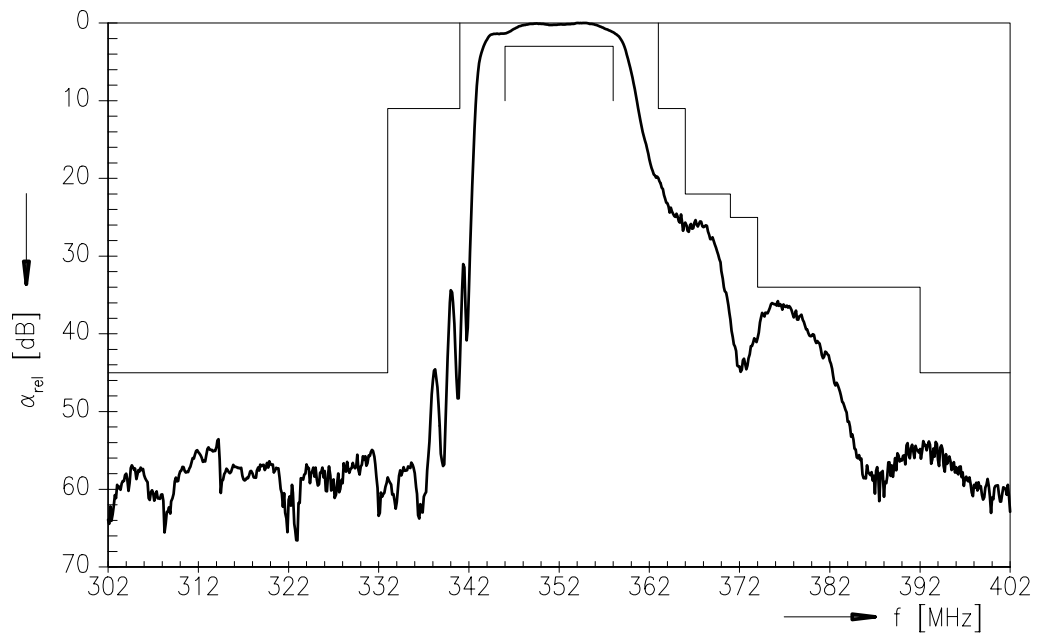
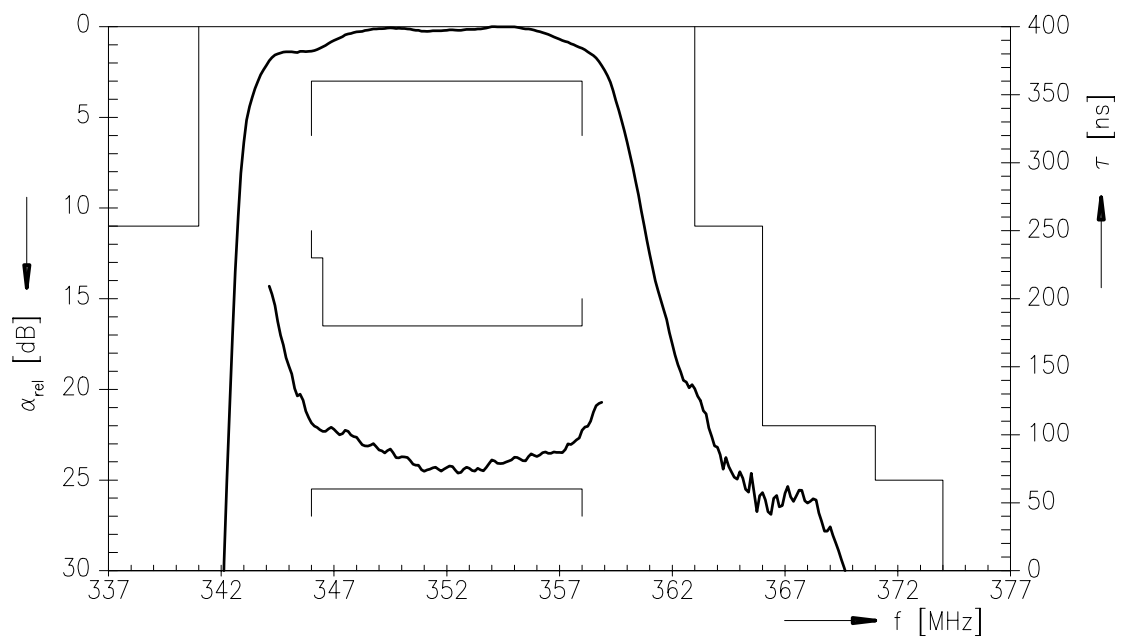
**SAW Components****B3680****Low-Loss Filter****352,0 MHz****Data Sheet****matching network:**

$$C_{s1} = 10 \text{ pF}$$

$$L_{p2} = 27 \text{ nH}$$

$$C_{p3} = 1,2 \text{ pF}$$

$$L_{s4} = 27 \text{ nH}$$

**SAW Components****B3680****Low-Loss Filter****352,0 MHz****Data Sheet****Transfer function:****Transfer function (pass band):**



SAW Components	B3680
Low-Loss Filter	352,0 MHz

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Published by EPCOS AG

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