



SAW Components

Data Sheet B3834

Data Sheet

A large, stylized EPCOS logo is superimposed over a grayscale image of a globe. The logo is rendered in a light, glowing font. The globe shows continents and is partially obscured by the logo.



SAW Components

B3834

Low-Loss Filter

390,0 MHz

Data Sheet

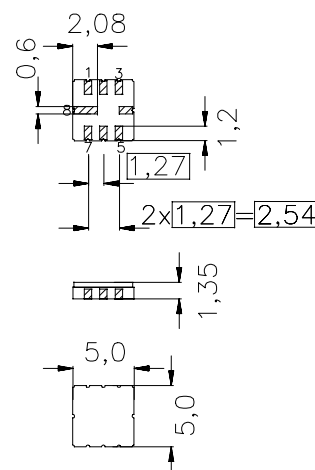
Ceramic SMD package QCC8C

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

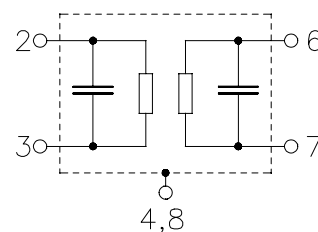
- Gold plated



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
B3834	B39391-B3834-U310	C61157-A7-A56	F61074-V8070-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	-40/ +85	$^{\circ}\text{C}$
Storage temperature range	T_{stg}	-40/ +85	$^{\circ}\text{C}$
DC voltage	V_{DC}	0	V
Source power	P_{s}	10	dBm



SAW Components	B3834
Low-Loss Filter	390,0 MHz

Data Sheet

Characteristics

Operating temperature:	$T = +25\text{ °C}$
Terminating source impedance:	$50\ \Omega$
Terminating load impedance:	$50\ \Omega$

		min.	typ.	max.	
Nominal frequency	f_N	—	390,0	—	MHz
Maximum insertion attenuation 380,0 MHz ... 400,0 MHz	$\alpha_{\max}$	—	2,1	2,3	dB
Amplitude ripple (p-p) 380,0 MHz ... 400,0 MHz	$\Delta\alpha$	—	0,6	0,9	dB
Absolute attenuation 0,1 MHz ... 349,0 MHz	α_{abs}	20	25	—	dB
434,825 MHz ... 454,825 MHz		10	20	—	dB
489,650 MHz ... 509,650 MHz		28	30	—	dB
599,300 MHz ... 619,300 MHz		24	28	—	dB
619,300 MHz ... 1000,00 MHz		26	29	—	dB
Return loss (Input) 380,0 MHz ... 385,0 MHz		8,0	9,0	—	dB
385,0 MHz ... 400,0 MHz		10,0	12,0	—	dB
Return loss (Output) 380,0 MHz ... 400,0 MHz		10,0	12,0	—	dB
Temperature coefficient of frequency	TC_f	—	– 70	—	ppm/K



SAW Components	B3834
Low-Loss Filter	390,0 MHz

Data Sheet

Characteristics

Operating temperature:	$T = +5 \dots +45 \text{ }^{\circ}\text{C}$
Terminating source impedance:	$50 \text{ } \Omega$
Terminating load impedance:	$50 \text{ } \Omega$

		min.	typ.	max.	
Nominal frequency	f_N	—	390,0	—	MHz
Maximum insertion attenuation 380,0 MHz ... 400,0 MHz	$\alpha_{\max}$	—	2,2	2,5	dB
Amplitude ripple (p-p) 380,0 MHz ... 400,0 MHz	$\Delta\alpha$	—	0,7	1,0	dB
Absolute attenuation 0,1 MHz ... 349,0 MHz 434,825 MHz ... 454,825 MHz 489,650 MHz ... 509,650 MHz 599,300 MHz ... 619,300 MHz 619,300 MHz ... 1000,00 MHz	α_{abs}	20 10 28 24 26	25 20 30 28 29	— — — — —	dB dB dB dB dB
Return loss (Input) 380,0 MHz ... 385,0 MHz 385,0 MHz ... 400,0 MHz		8,0 10,0	9,0 12,0	— —	dB dB
Return loss (Output) 380,0 MHz ... 400,0 MHz		10,0	12,0	—	dB
Temperature coefficient of frequency	TC_f	—	– 70	—	ppm/K



SAW Components	B3834
Low-Loss Filter	390,0 MHz

Data Sheet

Characteristics

Operating temperature:	$T = -30 \dots +80 \text{ }^{\circ}\text{C}$
Terminating source impedance:	$50 \text{ } \Omega$
Terminating load impedance:	$50 \text{ } \Omega$

		min.	typ.	max.	
Nominal frequency	f_N	—	390,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
380,0 MHz ... 381,0 MHz		—	2,3	3,1	dB
381,0 MHz ... 399,0 MHz		—	2,2	2,7	dB
399,0 MHz ... 400,0 MHz		—	2,5	3,1	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
380,0 MHz ... 381,0 MHz		—	0,7	1,5	dB
381,0 MHz ... 399,0 MHz		—	0,7	1,0	dB
399,0 MHz ... 400,0 MHz		—	0,7	1,5	dB
Absolute attenuation	α_{abs}				
0,1 MHz ... 349,0 MHz		20	25	—	dB
434,825 MHz ... 454,825 MHz		10	20	—	dB
489,650 MHz ... 509,650 MHz		28	30	—	dB
599,300 MHz ... 619,300 MHz		24	28	—	dB
619,300 MHz ... 1000,00 MHz		26	29	—	dB
Return loss (Input)					
380,0 MHz ... 385,0 MHz		8,0	9,0	—	dB
385,0 MHz ... 400,0 MHz		10,0	12,0	—	dB
Return loss (Output)					
380,0 MHz ... 400,0 MHz		10,0	12,0	—	dB
Temperature coefficient of frequency	TC_f	—	- 70	—	ppm/K



SAW Components

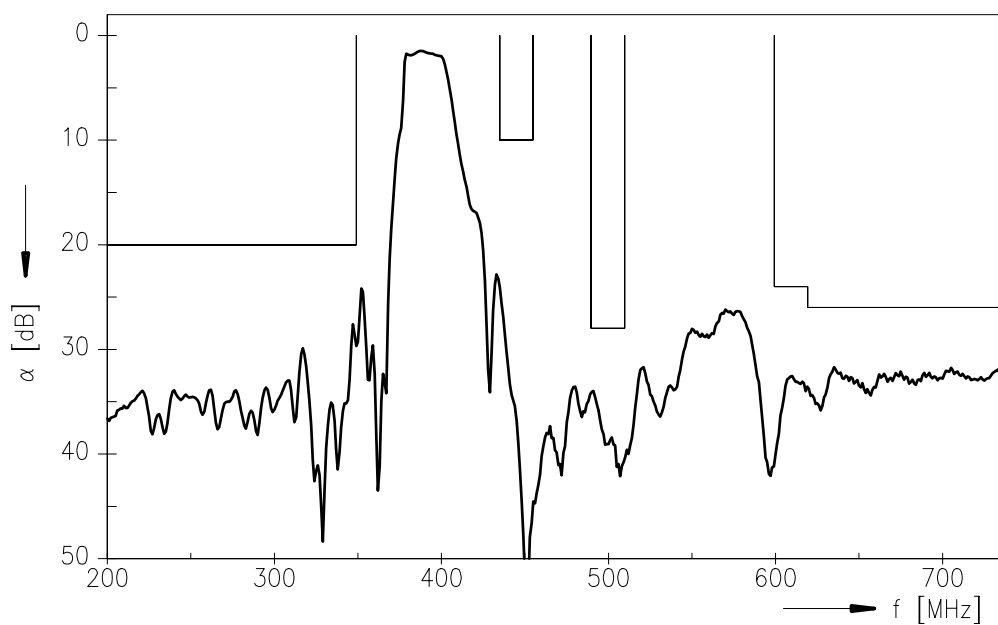
B3834

Low-Loss Filter

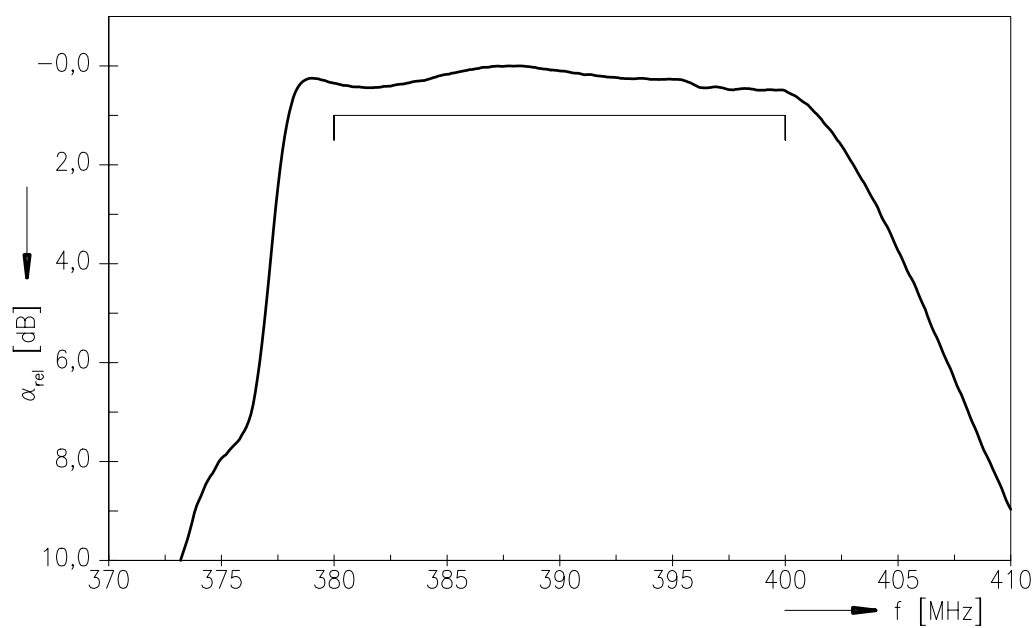
390,0 MHz

Data Sheet

Transfer function



Normalized Transfer function (pass band, +5 ... +45 °C)





SAW Components	B3834
Low-Loss Filter	390,0 MHz

Data Sheet

Published by EPCOS AG
Surface Acoustic Wave Components Division, SAW MC IS
P.O. Box 80 17 09, D-81617 München

© EPCOS AG 2001. All Rights Reserved. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

The information contained in this brochure describes the type of component and shall not be considered as guaranteed characteristics. Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

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.