



SAW Components

Data Sheet B5008

Data Sheet

An abstract, grayscale graphic featuring a globe with a grid pattern, overlaid with a large, stylized, and slightly blurred "EPCOS" logo. The logo is rendered in a light gray, almost white, color, giving it a three-dimensional appearance as if it's floating or attached to the globe. The background is dark and textured, with some light streaks and a sense of motion or depth.

EPCOS



SAW Components

B5008

Low-Loss Filter

833,0 MHz

Data Sheet

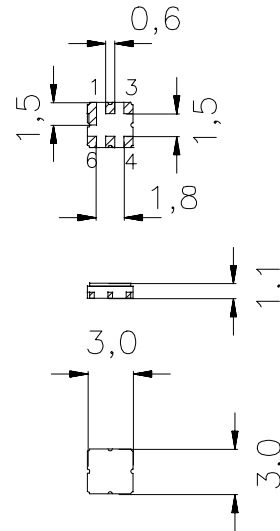
Ceramic package DCC6C

Features

- Low-loss RF filter for Multi Carrier Basestation (CDMA), receive path
- Usable bandwidth 34 MHz
- No matching required for operation at 50 Ω
- Package for Surface Mounted Technology (SMT)
- Hermetically sealed ceramic package

Terminals

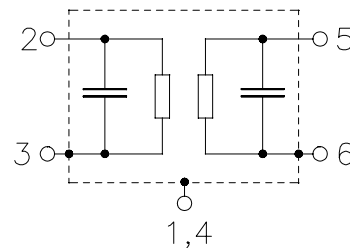
- Ni, gold-plated



typ. Dimensions in mm, approx. weight 0,037 g

Pin configuration

- 2 Input
- 5 Output
- 1, 3, 4, 6 To be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B5008	B39831-B5008-U410	C61157-A7-A67	F61074-V8168-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T_A	-40 / +85	$^{\circ}\text{C}$	
Storage temperature range	T_{stg}	-40 / +85	$^{\circ}\text{C}$	
DC voltage	V_{DC}	0	V	
ESD voltage	V_{ESD}	100 ¹⁾	V	Machine Model, 10 pulses
Input power max.				
861,0 ... 894,0 MHz	P_{IN}	12	dBm	continuous wave, 85 $^{\circ}\text{C}$
	P_{IN}	15	dBm	continuous wave, 55 $^{\circ}\text{C}$

1) acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses



SAW Components

B5008

Low-Loss Filter

833,0 MHz

Data Sheet

Characteristics

Operating temperature range: $T = 25 \pm 2 \text{ }^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50 \text{ } \Omega$
 Terminating load impedance: $Z_L = 50 \text{ } \Omega$

		min.	typ.	max.	
Nominal frequency	f_N	—	833,0	—	MHz
Maximum insertion attenuation 816,0 MHz ... 850,0 MHz	$\alpha_{\max}$	—	1,9	3,0	dB
Amplitude ripple (p-p) 816,0 MHz ... 850,0 MHz	$\Delta\alpha$	—	1,0	2,0	dB
Return loss (Input and Output) 816,0 MHz ... 850,0 MHz		10	11,5	—	dB
Absolute attenuation	α_{abs}				
861,0 MHz ... 894,0 MHz		12	21	—	dB
985,0 MHz ... 1020,0 MHz		20	35	—	dB



SAW Components

B5008

Low-Loss Filter

833,0 MHz

Data Sheet

Characteristics

Operating temperature range: $T = +35 \dots +85 \text{ }^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50 \text{ } \Omega$
 Terminating load impedance: $Z_L = 50 \text{ } \Omega$

		min.	typ.	max.	
Nominal frequency	f_N	—	833,0	—	MHz
Maximum insertion attenuation 816,0 MHz ... 850,0 MHz	$\alpha_{\max}$	—	2,1	3,0	dB
Amplitude ripple (p-p) 816,0 MHz ... 850,0 MHz	$\Delta\alpha$	—	1,1	2,0	dB
Return loss (Input and Output) 816,0 MHz ... 850,0 MHz		10	11,5	—	dB
Absolute attenuation	α_{abs}				
861,0 MHz ... 894,0 MHz		12	21	—	dB
985,0 MHz ... 1020,0 MHz		20	35	—	dB



SAW Components

B5008

Low-Loss Filter

833,0 MHz

Data Sheet

Characteristics

Operating temperature range: $T = 0 \dots +85 \text{ }^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50 \text{ } \Omega$
 Terminating load impedance: $Z_L = 50 \text{ } \Omega$

		min.	typ.	max.	
Nominal frequency	f_N	—	833,0	—	MHz
Maximum insertion attenuation 816,0 MHz ... 850,0 MHz	$\alpha_{\max}$	—	2,1	3,5	dB
Amplitude ripple (p-p) 816,0 MHz ... 850,0 MHz	$\Delta\alpha$	—	1,1	2,5	dB
Return loss (Input and Output) 816,0 MHz ... 850,0 MHz		9	11,5	—	dB
Absolute attenuation	α_{abs}				
861,0 MHz ... 894,0 MHz		12	21	—	dB
985,0 MHz ... 1020,0 MHz		20	35	—	dB



SAW Components

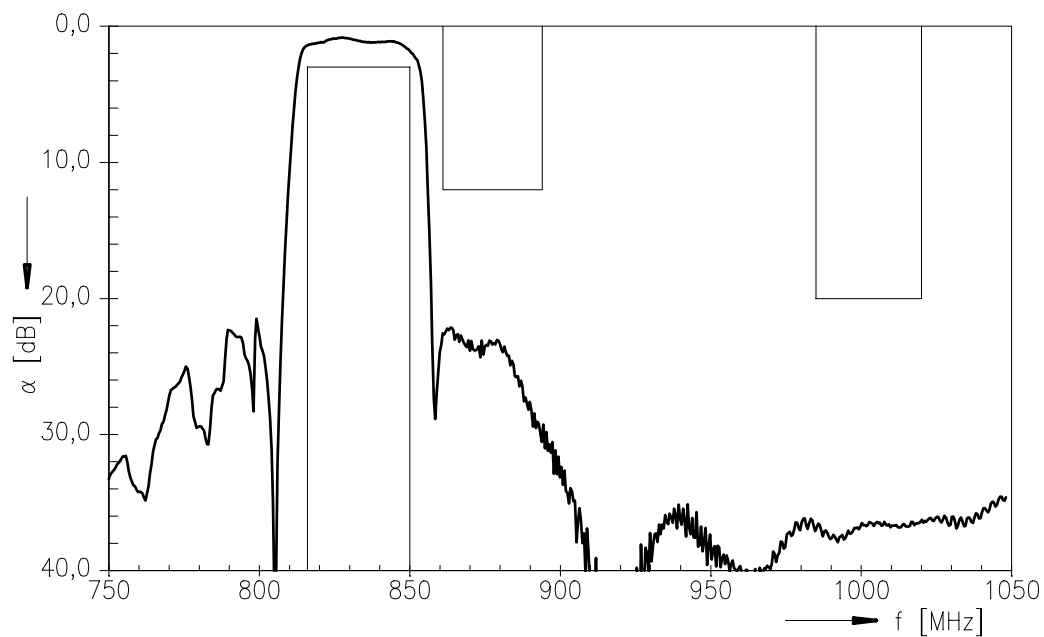
B5008

Low-Loss Filter

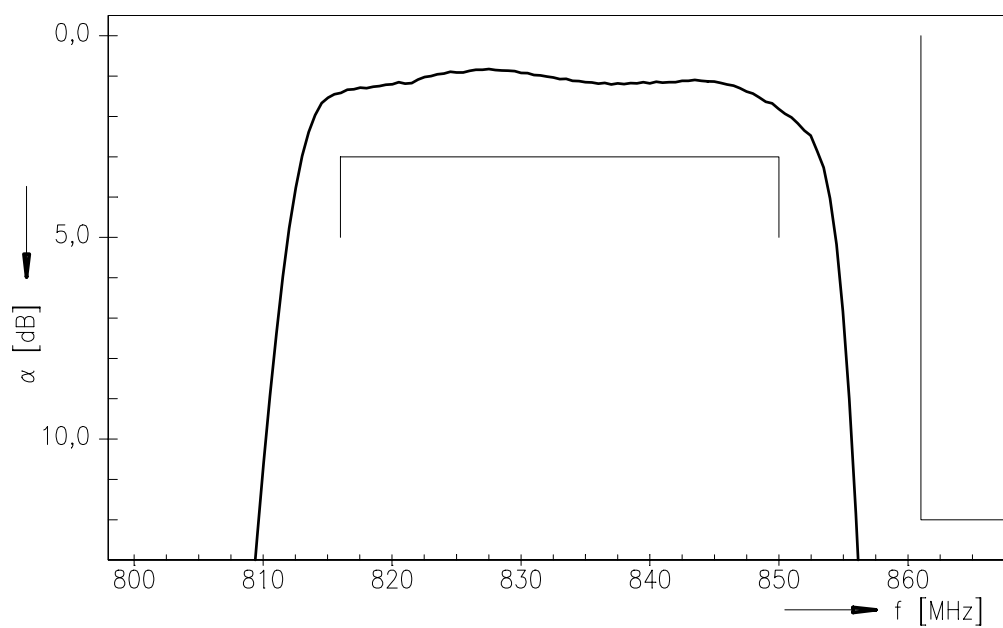
833,0 MHz

Data Sheet

Transfer function



Transfer function (pass band)





SAW Components

B5008

Low-Loss Filter

833,0 MHz

Data Sheet

Published by EPCOS AG

Surface Acoustic Wave Components Division, SAW MC

P.O. Box 80 17 09, 81617 Munich, GERMANY

© EPCOS AG 2006. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

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.