



# SAW Components

Data Sheet B5008

Data Sheet

A large, stylized, 3D-rendered graphic of the EPCOS logo. The letters "EPCOS" are rendered in a white, glowing, sans-serif font, appearing to be part of a larger, curved structure that resembles the company's logo. The background is dark and textured, with a faint map of the world visible.



**SAW Components**

**B5008**

**Low-Loss Filter**

**833,0 MHz**

**Data Sheet**

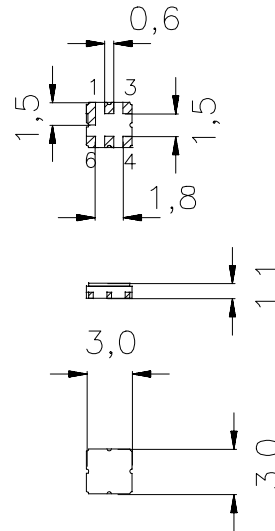
**Ceramic package DCC6C**

**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**

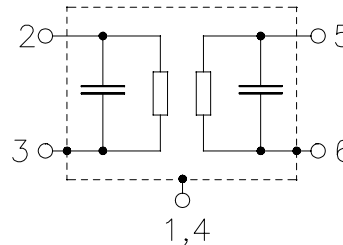
- Ni, gold-plated



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 <sub>A</sub>	-40 / +85	°C	Machine Model, 10 pulses
Storage temperature range	T <sub>stg</sub>	-40 / +85	°C	
DC voltage	V <sub>DC</sub>	0	V	
ESD voltage	V <sub>ESD</sub>	100 <sup>1)</sup>	V	
Input power max.				
861,0 ... 894,0 MHz	P <sub>IN</sub>	12	dBm	
	P <sub>IN</sub>	15	dBm	continuous wave, 55 °C

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



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



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



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**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.	
<b>Nominal frequency</b>	$f_N$	—	833,0	—	MHz
<b>Maximum insertion attenuation</b> 816,0 MHz ... 850,0 MHz	$\alpha_{\max}$	—	2,1	3,5	dB
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<b>Return loss (Input and Output)</b> 816,0 MHz ... 850,0 MHz		9	11,5	—	dB
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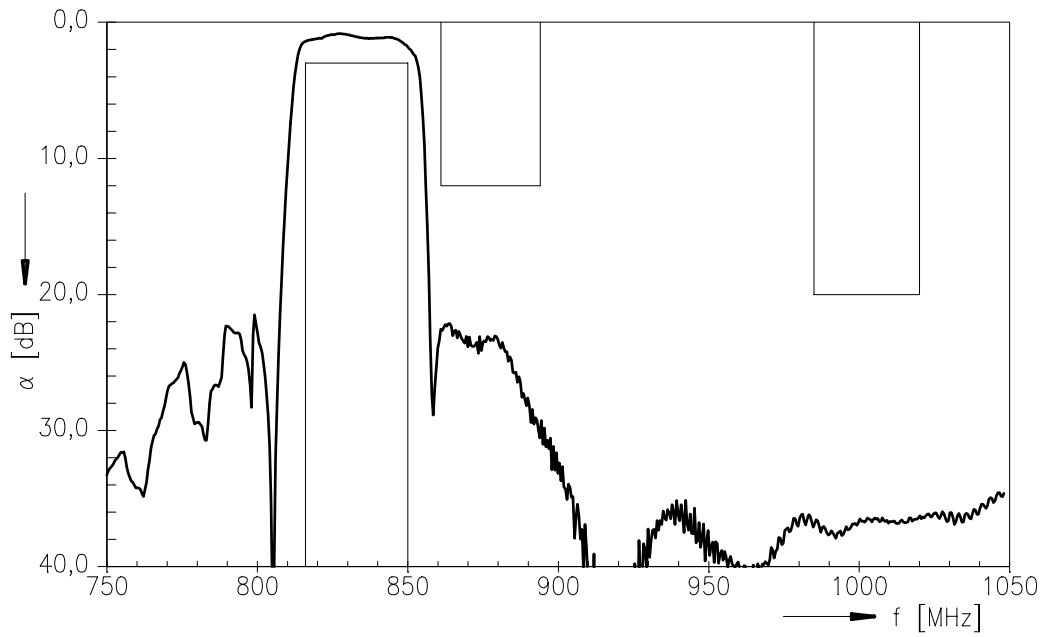
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Low-Loss Filter

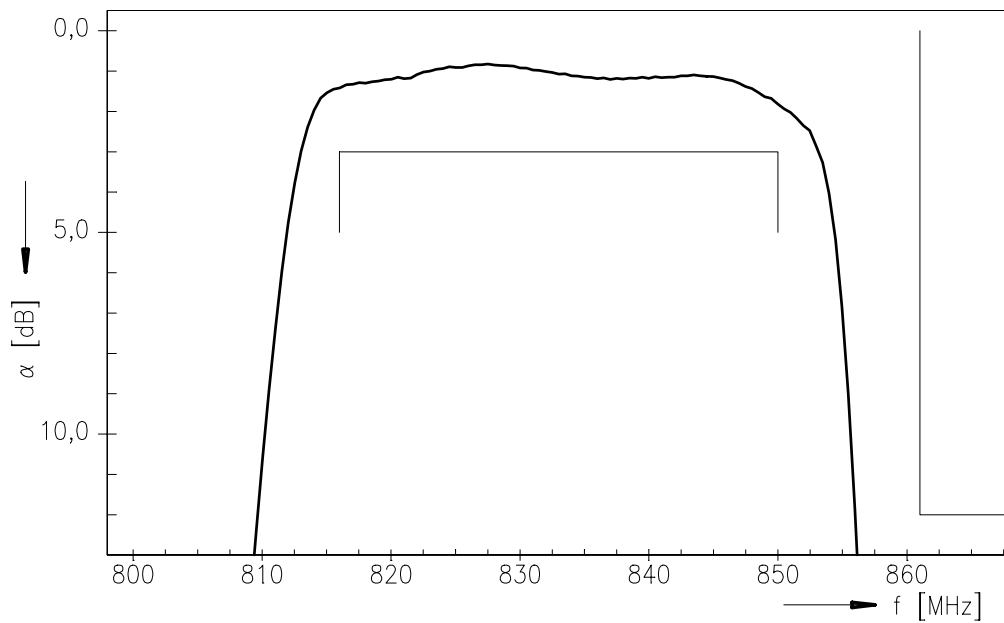
833,0 MHz

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Transfer function



Transfer function (pass band)





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