



SAW Components

Data Sheet B4169

Data Sheet

A large, stylized, 3D-rendered graphic of the word "EPCOS" in a light gray, sans-serif font. The letters are slightly tilted and appear to be floating or emerging from a dark, textured background that resembles a globe or a complex circuit board. The overall effect is a sense of depth and modernity.



SAW Components	B4169
Low-Loss Filter for Mobile Communication	1842,5 MHz
Data Sheet	SMD

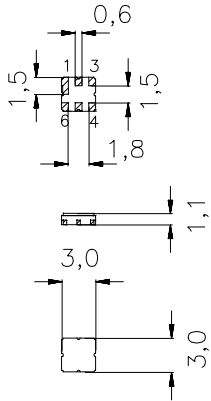
Ceramic package **DCC6D**

Features

- Low-loss RF filter for mobile telephone PCN systems, receive path
- Low amplitude ripple
- Usable passband 75 MHz
- Unbalanced to balanced operation
- Package for **Surface Mounted Technology (SMT)**
- Ceramic SMD package

Terminals

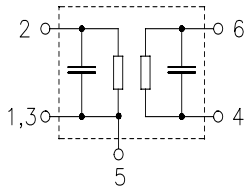
- Ni, gold-plated



Dimensions in mm, approx. weight 0,037 g

Pin configuration

2	Input, unbalanced
4, 6	Output, balanced
1, 3	Input ground
1, 3, 5	To be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B4169	B39182-B4169-U510	C61157-A7-A68	F61074-V8089-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 10 / + 75	°C	
Storage temperature range	T_{stg}	- 40 / + 85	°C	
DC voltage	V_{DC}	3	V	
Input power max.	P_{IN}			source/load impedance 50Ω/50Ω
1710,0 ... 1785,0 MHz		15	dBm	peak power of GSM signal, duty cycle 1:8 (2000 h, 75 °C max.)



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Characteristics

Operating Temperature Range: $T = +25 \pm 2^\circ\text{C}$
 Terminating source impedance: $Z_S = 50 \Omega$ (unbalanced)
 Terminating load impedance: $Z_L = 50 \Omega$ (balanced)

		min.	typ.	max.	
Center frequency	f_C	—	1842,5	—	MHz
Maximum insertion attenuation	α_{\max}	—	3,0	3,5	dB
	1805,0 ... 1880,0 MHz	—	3,0	3,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$	—	1,2	1,7	dB
	1805,0 ... 1880,0 MHz	—	1,2	1,7	dB
Attenuation	α				
	0 ... 1705,0 MHz	23	35	—	dB
	1705,0 ... 1785,0 MHz	10	15	—	dB
	1920,0 ... 1980,0 MHz	10	13	—	dB
	1980,0 ... 6000,0 MHz	23	27	—	dB



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Characteristics

Operating Temperature Range: $T = -10$ to $+75^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$ (unbalanced)
 Terminating load impedance: $Z_L = 50\ \Omega$ (balanced)

		min.	typ.	max.	
Center frequency	f_C	—	1842,5	—	MHz
Maximum insertion attenuation	α_{\max}	—	3,2	4,0	dB
	1805,0 ... 1880,0 MHz				
Amplitude ripple (p-p)	$\Delta\alpha$	—	1,4	2,2	dB
	1805,0 ... 1880,0 MHz				
Attenuation	α				
	0 ... 1705,0 MHz	23	35	—	dB
	1705,0 ... 1785,0 MHz	9	14	—	dB
	1920,0 ... 1980,0 MHz	9	13	—	dB
	1980,0 ... 6000,0 MHz	23	27	—	dB



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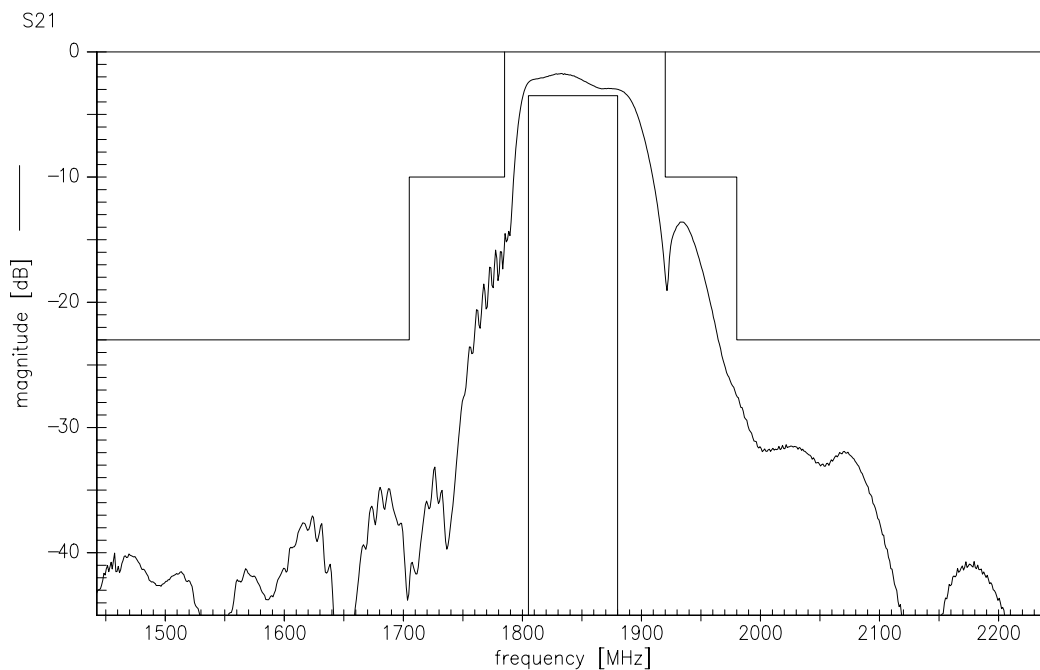
Low-Loss Filter for Mobile Communication

1842,5 MHz

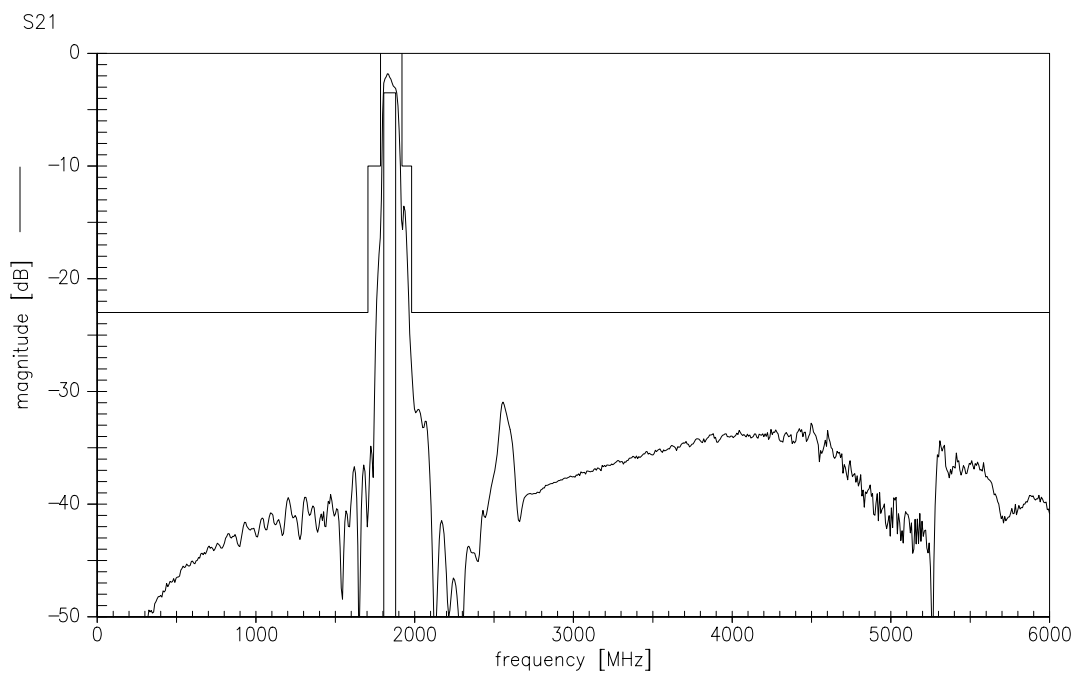
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Transfer function



Transfer function (wide band)





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