



SAW Components

Data Sheet B4133

Data Sheet

An abstract, grayscale graphic featuring a stylized, glowing globe with a grid pattern. The word "EPCOS" is written in large, white, sans-serif capital letters across the globe, appearing to be part of the design.



SAW Components	B4133
Low-Loss Filter for Mobile Communication	1842,5 MHz
Data Sheet	SMD

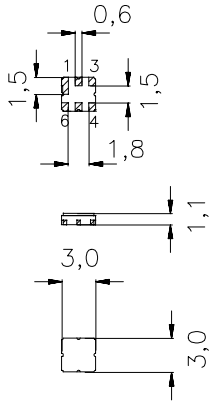
Ceramic package **DCC6D**

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

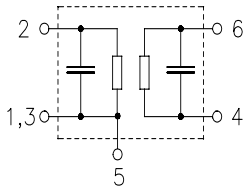
- Ni, gold-plated



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
B4133	B39182-B4133-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}	5	V	
Input power max.	P_{IN}			source/load impedance 50Ω/50Ω
1710,0 ... 1785,0 MHz		5	dBm	peak power of GSM signal duty cycle 1:8
elsewhere		0	dBm	



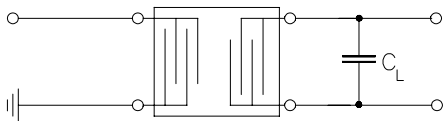
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Characteristics

Operating Temperature Range:	$T = +25 \pm 2^{\circ}\text{C}$
Terminating source impedance:	$Z_S = 50\ \Omega$ (unbalanced)
Terminating load impedance:	$Z_L = 50\ \Omega \parallel 1\ \text{pF}$ (balanced)

		min.	typ.	max.	
Center frequency	f_C	—	1842,5	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
1805,0 ... 1880,0 MHz		—	3,1	3,8	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1805,0 ... 1880,0 MHz		—	0,8	1,8	dB
Attenuation	α				
0,0 ... 1160,0 MHz		37	42	—	dB
1160,0 ... 1430,0 MHz		30	45	—	dB
1430,0 ... 1705,0 MHz		20	24	—	dB
1705,0 ... 1785,0 MHz		10	12	—	dB
1920,0 ... 1980,0 MHz		10	13	—	dB
1980,0 ... 2100,0 MHz		20	23	—	dB
2100,0 ... 6000,0 MHz		20	28	—	dB

Matching network to 50 Ω load with $C_L = 1\ \text{pF}$





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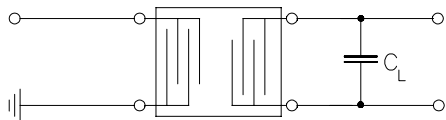


Characteristics

Operating Temperature Range:	$T = -10 \text{ to } +75^{\circ}\text{C}$
Terminating source impedance:	$Z_S = 50 \Omega$ (unbalanced)
Terminating load impedance:	$Z_L = 50 \Omega \parallel 1 \text{ pF}$ (balanced)

		min.	typ.	max.	
Center frequency	f_C	—	1842,5	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$	—	3,2	4,3	dB
	1805,0 ... 1880,0 MHz				
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,9	2,3	dB
	1805,0 ... 1880,0 MHz				
Attenuation	α				
	0,0 ... 1160,0 MHz	37	42	—	dB
	1160,0 ... 1430,0 MHz	30	45	—	dB
	1430,0 ... 1705,0 MHz	20	24	—	dB
	1705,0 ... 1785,0 MHz	9	12	—	dB
	1920,0 ... 1980,0 MHz	9	12	—	dB
	1980,0 ... 2100,0 MHz	20	23	—	dB
	2100,0 ... 6000,0 MHz	20	28	—	dB

Matching network to 50Ω load with $C_L = 1 \text{ pF}$





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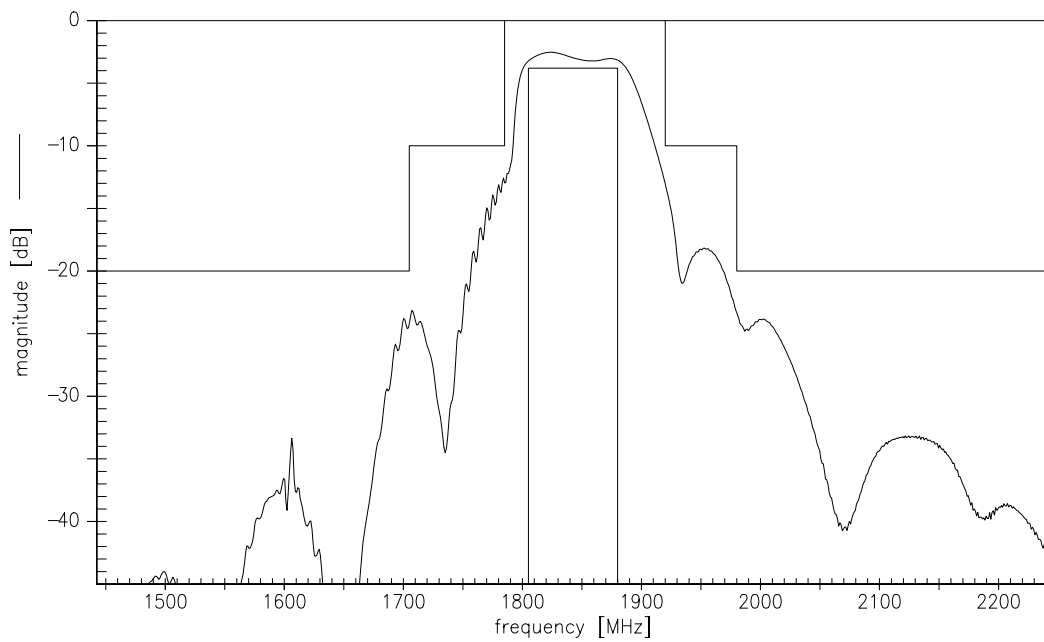
Low-Loss Filter for Mobile Communication

1842,5 MHz

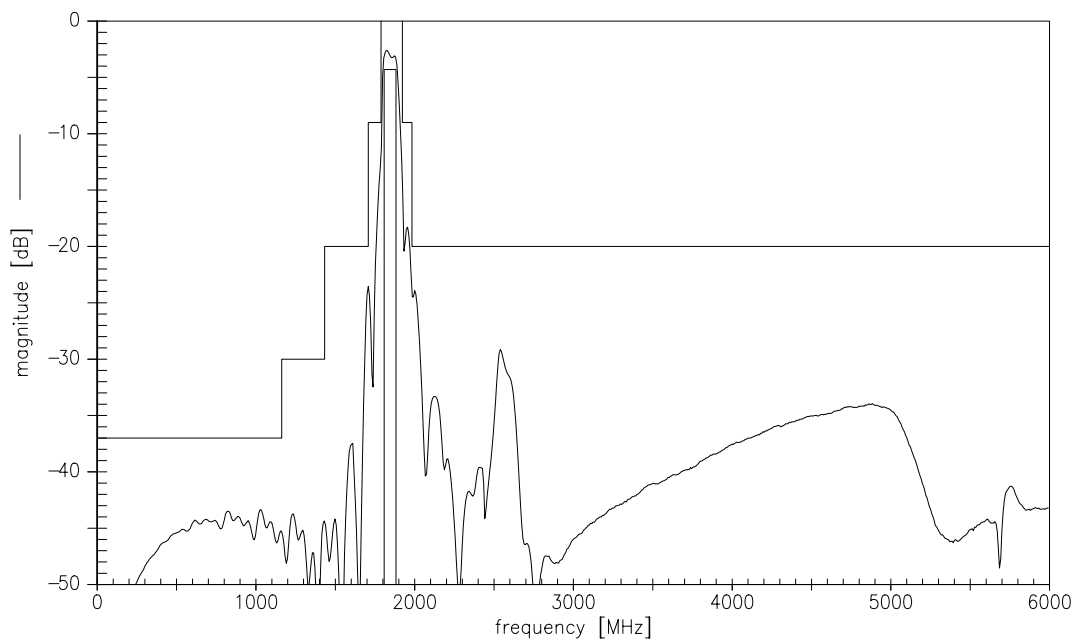
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Transfer function



Transfer function (wide band)





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