EPCOS

SAW Components

Data Sheet B4133



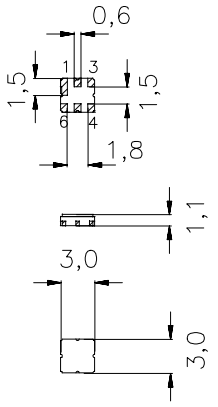
Ceramic package **DCC6D**

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 **S**urface **M**ounted **T**echnology (**SMT**)
- Ceramic SMD package

Terminals

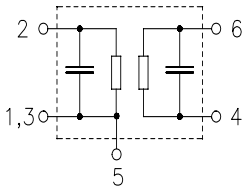
- Ni, gold-plated



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 **S**ensitive **D**evice (**ESD**)

Maximum ratings

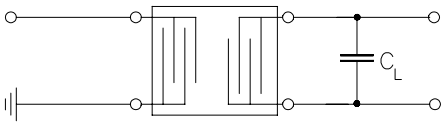
Operable temperature range	T	– 10 / + 75	˚C	
Storage temperature range	T_{stg}	– 40 / + 85	˚C	
DC voltage	V_{DC}	5	V	
Input power max.	P_{IN}			source/load impedance 50Ω/50Ω
1710,0 ... 1785,0 MHz		5	dBm	peak power of GSM signal duty cycle 1:8
elsewhere		0	dBm	

Characteristics

Operating Temperature Range: T = +25 +- 2˚C
Terminating source impedance: Z_S = 50 Ω (unbalanced)
Terminating load impedance: Z_L = 50 Ω || 1 pF (balanced)

		min.	typ.	max.	
Center frequency	f_C	—	1842,5	—	MHz
Maximum insertion attenuation	α_{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 pF

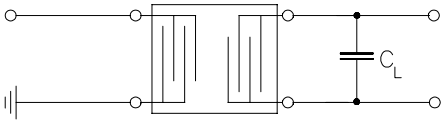


Characteristics

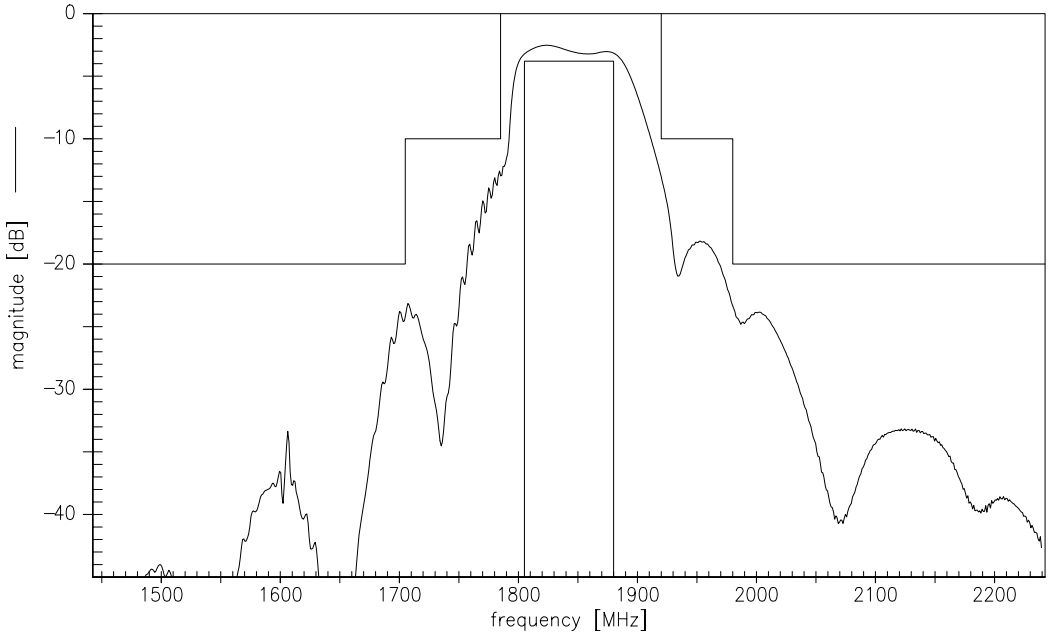
Operating Temperature Range: T = -10 to +75˚C
Terminating source impedance: Z_S = 50 Ω (unbalanced)
Terminating load impedance: Z_L = 50 Ω || 1 pF (balanced)

		min.	typ.	max.	
Center frequency	f_C	—	1842,5	—	MHz
Maximum insertion attenuation	α_{max}				
1805,0 ... 1880,0 MHz		—	3,2	4,3	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1805,0 ... 1880,0 MHz		—	0,9	2,3	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		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

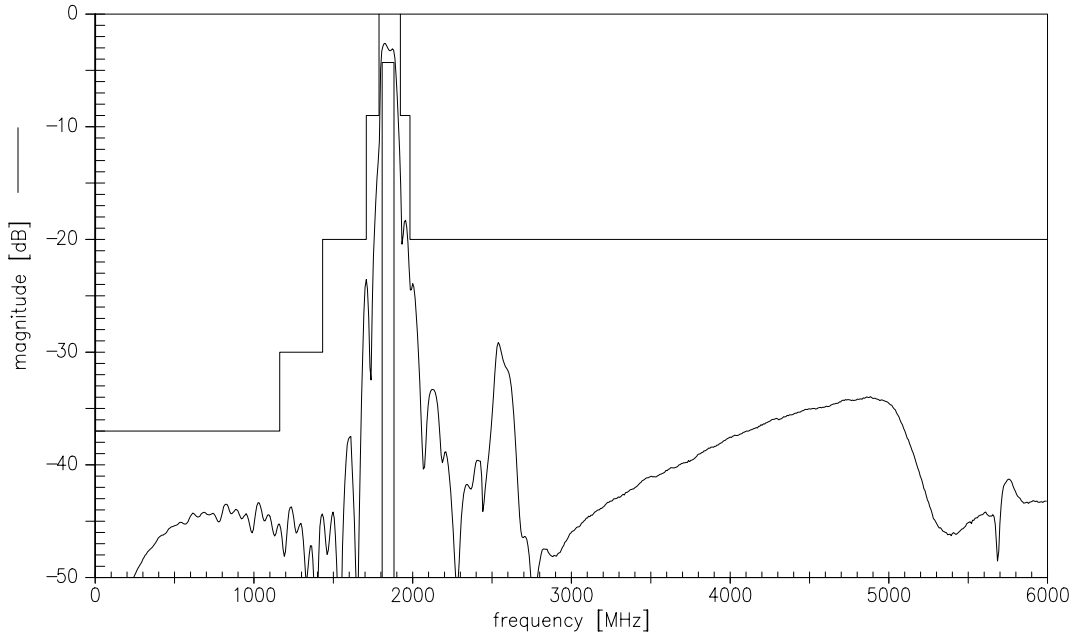
Matching network to 50 Ω load with C_L =1 pF



Transfer function



Transfer function (wide band)



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