



SAW Components

Data Sheet B4135

Data Sheet

An abstract, grayscale graphic featuring a stylized globe with latitude and longitude lines. Overlaid on the globe is the word "EPCOS" in a large, white, sans-serif font, which is slightly tilted and appears to be part of the globe's structure.



SAW Components

B4135

Low-Loss Filter for Mobile Communication

1960,00 MHz

Data Sheet



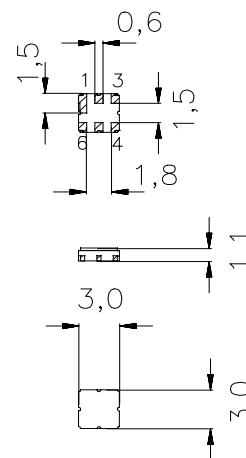
Ceramic package **DCC6C**

Features

- Low-loss RF filter for mobile telephone PCS systems, receive path
- Usable passband 60 MHz
- No matching network required for operation at 50 Ω
- Package for **Surface Mounted Technology (SMT)**

Terminals

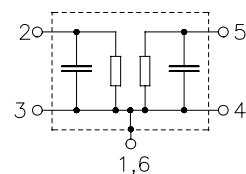
- Ni, gold-plated



Dimensions in mm, approx. weight 0,037 g

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B4135	B39202-B4135-U410	C61157-A7-A67	F61074-V8088-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 40/+ 85	$^{\circ}\text{C}$	Contact discharge, $R_s=0\ \Omega$, $C_s=200\ \text{pF}$ source and load impedance 50 Ω peak power of GSM signal, duty cycle 1 : 8 CDMA signal
Storage temperature range	T_{stg}	- 40/+ 85	$^{\circ}\text{C}$	
DC voltage	V_{DC}	0	V	
ESD	V_{DC}	50	V	
Input power max.	P_{IN}	5	dBm	
		0	dBm	



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Characteristics

Operating temperature range: $T = +25 \pm 2^\circ \text{C}$

Terminating source impedance: $Z_S = 50 \Omega$

Terminating load impedance: $Z_L = 50 \Omega$

			min.	typ.	max.	
Center frequency	f_c		—	1960,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$					
	1930,0 ... 1990,0	MHz	—	3,1	3,7	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	1930,0 ... 1990,0	MHz	—	1,1	1,7	dB
Input VSWR						
	1930,0 ... 1990,0	MHz	—	2,1	2,4	
Output VSWR						
	1930,0 ... 1990,0	MHz	—	2,1	2,4	
Attenuation	α					
	10,0 ... 1850,0	MHz	20,0	22,0	—	dB
	1850,0 ... 1910,0	MHz	17,5	28,0	—	dB
	2010,0 ... 2040,0	MHz	5,0	10,0	—	dB
	2040,0 ... 2070,0	MHz	20,0	30,0	—	dB
	2070,0 ... 5000,0	MHz	22,0	27,0	—	dB
	5000,0 ... 6000,0	MHz	10,0	18,0	—	dB



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Characteristics

Operating temperature range: $T = -30$ to $+80^{\circ}\text{C}$

Terminating source impedance: $Z_S = 50\ \Omega$

Terminating load impedance: $Z_L = 50\ \Omega$

			min.	typ.	max.	
Center frequency	f_c		—	1960,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$					
	1930,0 ... 1990,0	MHz	—	3,3	4,1	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	1930,0 ... 1990,0	MHz	—	1,3	2,1	dB
Input VSWR						
	1930,0 ... 1990,0	MHz	—	2,1	2,4	
Output VSWR						
	1930,0 ... 1990,0	MHz	—	2,1	2,4	
Attenuation	α					
	10,0 ... 1850,0	MHz	20,0	22,0	—	dB
	1850,0 ... 1910,0	MHz	11,5	15,0	—	dB
	2010,0 ... 2040,0	MHz	4,5	10,0	—	dB
	2040,0 ... 2070,0	MHz	20,0	30,0	—	dB
	2070,0 ... 5000,0	MHz	22,0	27,0	—	dB
	5000,0 ... 6000,0	MHz	10,0	18,0	—	dB



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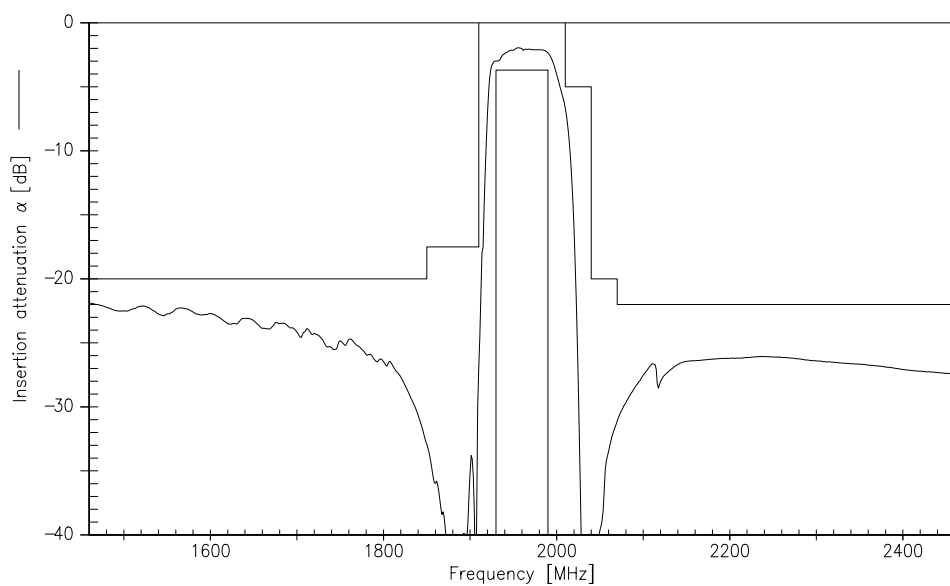
Characteristics

Operating temperature range: $T = -30$ to $+85^{\circ}\text{C}$
Terminating source impedance: $Z_S = 50\ \Omega$
Terminating load impedance: $Z_L = 50\ \Omega$

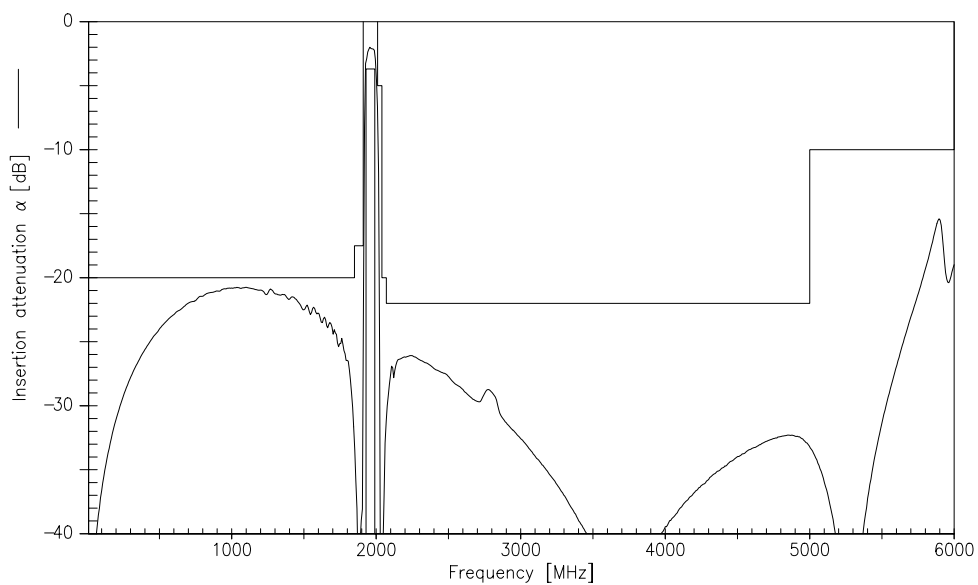
			min.	typ.	max.	
Center frequency	f_c		—	1960,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$					
	1930,6 ...1989,4	MHz	—	3,3	4,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	1930,6 ...1989,4	MHz	—	1,3	2,1	dB
Input VSWR						
	1930,6 ...1989,4	MHz	—	2,1	2,4	
Output VSWR						
	1930,6 ...1989,4	MHz	—	2,1	2,4	
Attenuation	α					
	10,0 ...1850,6	MHz	20,0	22,0	—	dB
	1850,6 ...1909,4	MHz	13,0 ¹⁾	15,0	—	dB
	2010,0 ...2040,0	MHz	4,5	10,0	—	dB
	2040,0 ...2070,0	MHz	20,0	30,0	—	dB
	2070,0 ...5000,0	MHz	22,0	27,0	—	dB
	5000,0 ...6000,0	MHz	10,0	18,0	—	dB

1) For -30 to $+65$ degree C, the minimum rejection is 15.0 dB

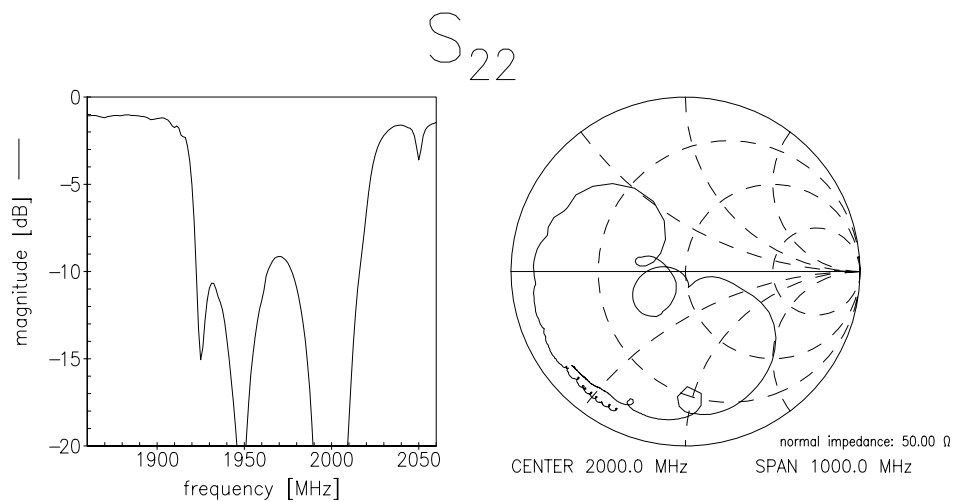
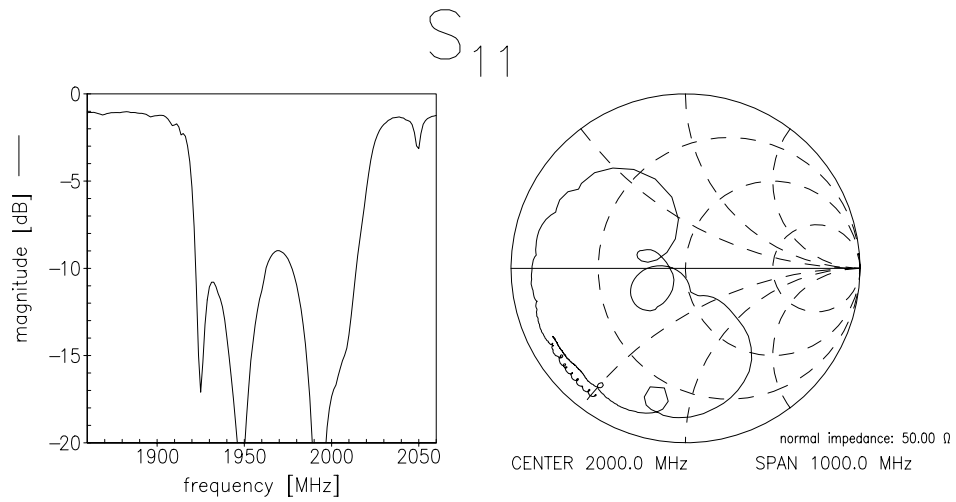
For -30 to $+25$ degree C, the minimum rejection is 19.0 dB



Transfer function (wideband)



Reflection functions





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