



SAW Components

Data Sheet B4181

Data Sheet

An abstract graphic featuring the word "EPCOS" in large, glowing, 3D letters. The letters are white with a bright, circular highlight in the center of each, giving them a three-dimensional appearance. They are set against a dark, textured background that includes a faint, stylized globe and a wavy, metallic-looking surface. The overall effect is futuristic and high-tech.



SAW Components

B4181

Low-Loss Filter for Mobile Communication

897,5 MHz

Data Sheet



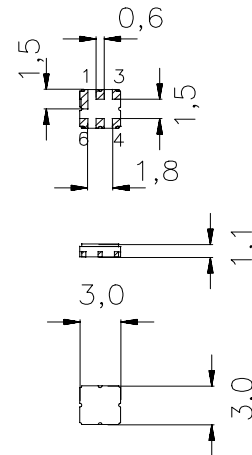
Ceramic package **DCC6C**

Features

- Low-loss RF filter for mobile telephone EGSM system, transmit path
- Low amplitude ripple
- Usable passband 35 MHz
- No matching network required for operation at 50 Ω
- Ceramic Package for Surface Mounted Technology (SMT)

Terminals

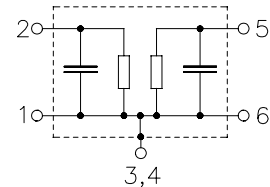
- Ni, gold-plated



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
B4181	B39901-B4181-U410	C61157-A7-A67	F61074-V8088-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 20 / +80	$^{\circ}\text{C}$	source and load impedance 50 Ω peak power of GSM signal, duty cycle 1 : 8 continuous wave
Storage temperature range	T_{stg}	- 40 / +85	$^{\circ}\text{C}$	
DC voltage	V_{DC}	3	V	
ESD voltage	V_{ESD}	50	V	
Input power max.	P_{IN}	15	dBm	
880...915 MHz				
elsewhere		5	dBm	



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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.	
Center frequency	f_c		—	897,50	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$					
	880,0 ... 915,0 MHz		—	1,8	2,2	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	880,0 ... 915,0 MHz		—	1,1	1,5	dB
Input VSWR						
	880,0 ... 915,0 MHz		—	2,0	2,2	
Output VSWR						
	880,0 ... 915,0 MHz		—	2,0	2,2	
Attenuation	α					
	0,0 ... 840,0 MHz		17	20		dB
	840,0 ... 860,0 MHz		17	29		dB
	860,0 ... 870,0 MHz		10	18		dB
	925,0 ... 935,0 MHz		4,5	12		dB
	935,0 ... 1850,0 MHz		20	22		dB
	1850,0 ... 3660,0 MHz		7	12		dB



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Characteristics

Operating temperature range: $T = -10$ to $80\text{ }^{\circ}\text{C}$
Terminating source impedance: $Z_S = 50\text{ }\Omega$
Terminating load impedance: $Z_L = 50\text{ }\Omega$

			min.	typ.	max.	
Center frequency	f_c		—	897,50	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$					
	880,0 ... 915,0 MHz		—	2,1	2,4	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
	880,0 ... 915,0 MHz		—	1,4	1,7	dB
Input VSWR						
	880,0 ... 915,0 MHz		—	2,0	2,2	
Output VSWR						
	880,0 ... 915,0 MHz		—	2,0	2,2	
Attenuation	α					
	0,0 ... 840,0 MHz		17	20		dB
	840,0 ... 860,0 MHz		17	29		dB
	860,0 ... 870,0 MHz		10	18		dB
	925,0 ... 935,0 MHz		4,5	12		dB
	935,0 ... 1850,0 MHz		20	22		dB
	1850,0 ... 3660,0 MHz		7	12		dB



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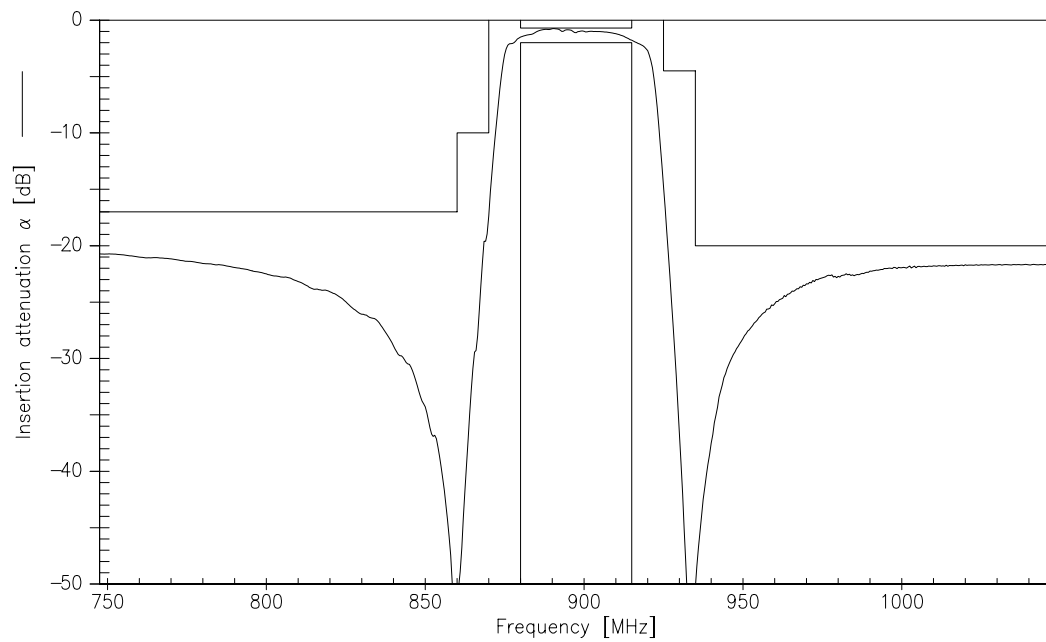
Low-Loss Filter for Mobile Communication

897,5 MHz

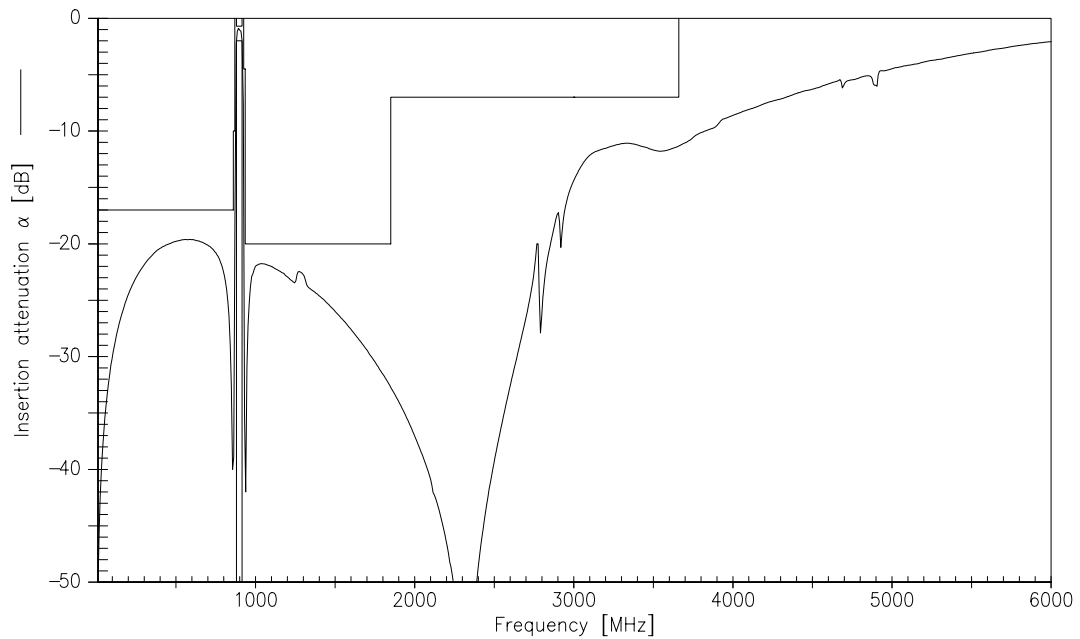
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Transfer function at 25 °C



Transfer function (wideband)





SAW Components	B4181
Low-Loss Filter for Mobile Communication	897,5 MHz
Data Sheet	SMD

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