



SAW Components

Data Sheet B4181





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Low-Loss Filter for Mobile Communication

897,5 MHz

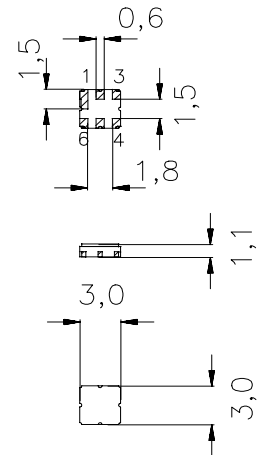
Data Sheet



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)



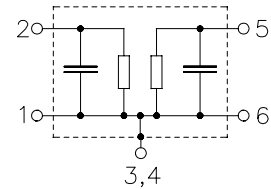
Terminals

- 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	°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	°C	
DC voltage	V_{DC}	3	V	
ESD voltage	V_{ESD}	50	V	
Input power max. 880...915 MHz	P_{IN}	15	dBm	
elsewhere		5	dBm	



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	α_{\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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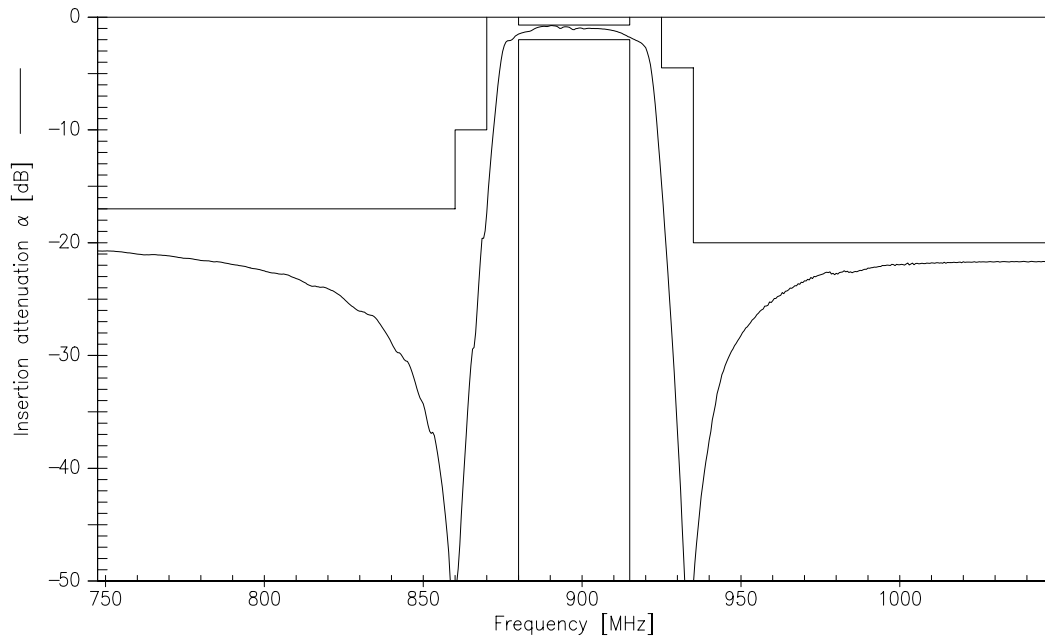
Characteristics

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

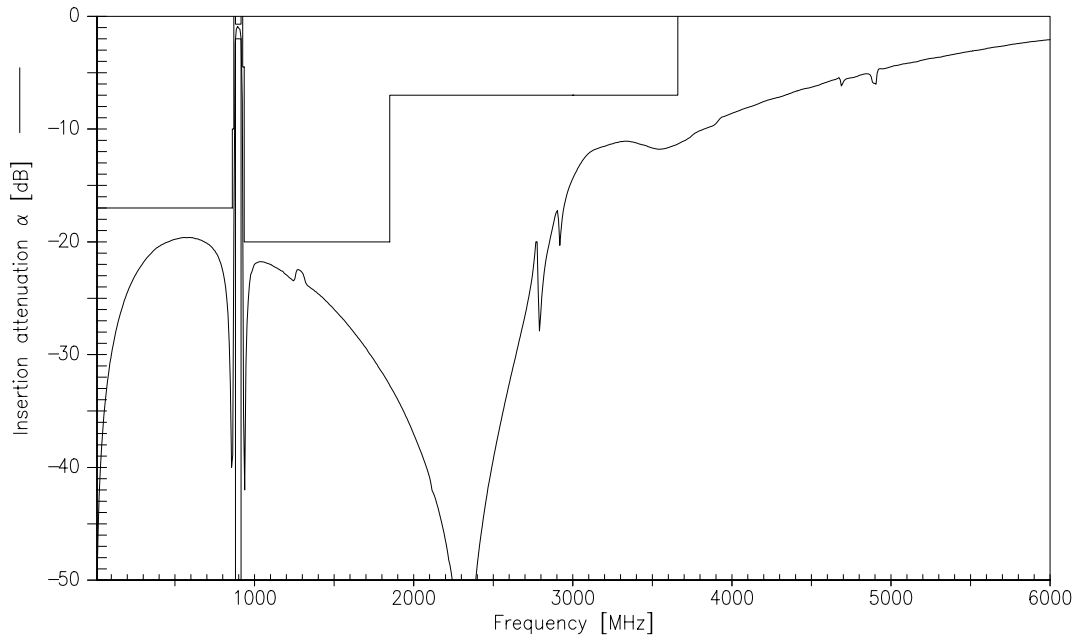
			min.	typ.	max.	
Center frequency	f_c		—	897,50	—	MHz
Maximum insertion attenuation	α_{\max}	880,0 ... 915,0 MHz	—	2,1	2,4	dB
Amplitude ripple (p-p)	$\Delta\alpha$	880,0 ... 915,0 MHz	—	1,4	1,7	dB
Input VSWR		880,0 ... 915,0 MHz	—	2,0	2,2	
Output VSWR		880,0 ... 915,0 MHz	—	2,0	2,2	
Attenuation	α	0,0 ... 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



Transfer function at 25 °C



Transfer function (wideband)





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