EPCOS

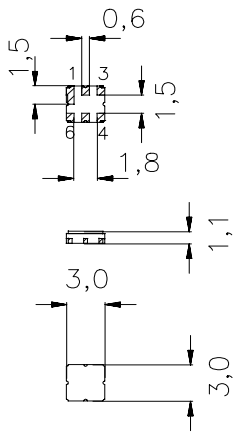
SAW Components

Data Sheet B4181

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)



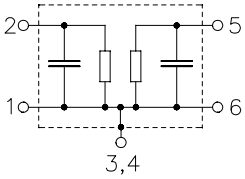
Terminals

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

Maximum ratings

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

Characteristics

Operating temperature range: T = 25 ± 2 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

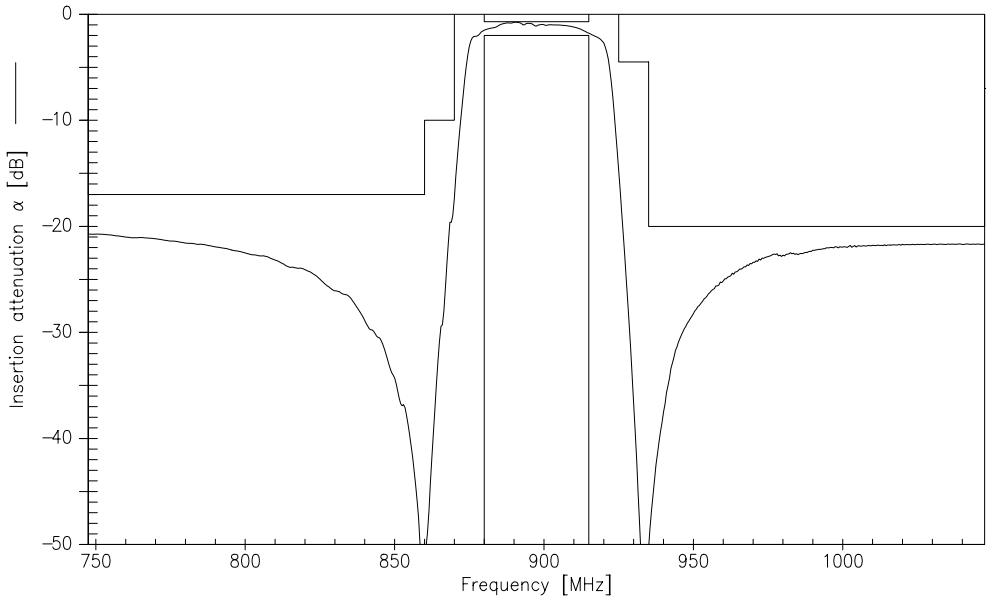
		min.	typ.	max.	
Center frequency	f_c	—	897,50	—	MHz
Maximum insertion attenuation	α_{max}				
880,0 ... 915,0 MHz		—	1,8	2,2	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
880,0 ... 915,0 MHz		—	1,1	1,5	dB
Input VSWR					
880,0 ... 915,0 MHz		—	2,0	2,2	
Output VSWR					
880,0 ... 915,0 MHz		—	2,0	2,2	
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

Characteristics

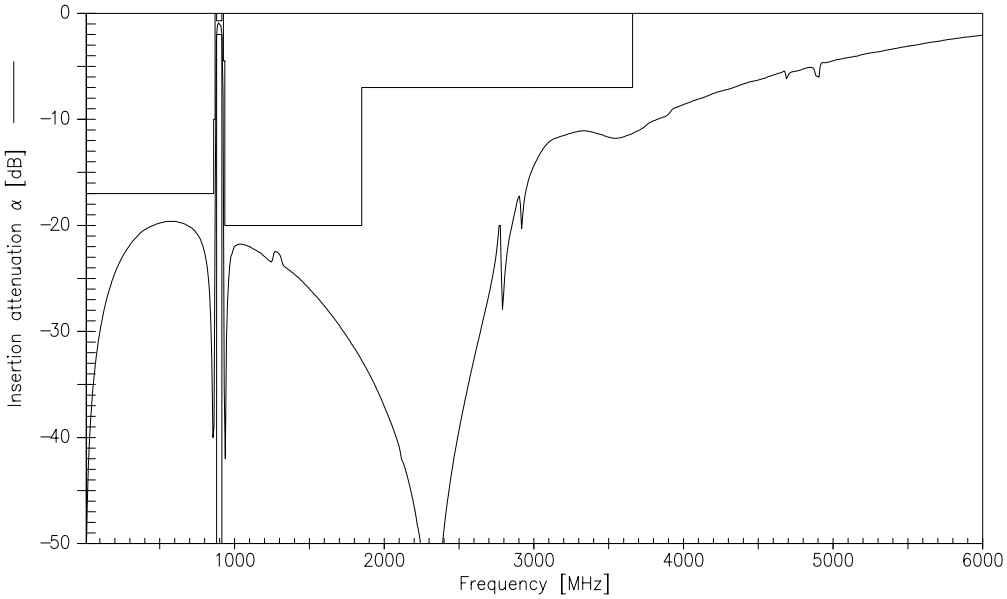
Operating temperature range: T = -10 to 80 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		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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