



SAW Components

Data Sheet B4165

Data Sheet



SAW Components	B4165
Low-Loss Filter for Mobile Communication	938,0 MHz

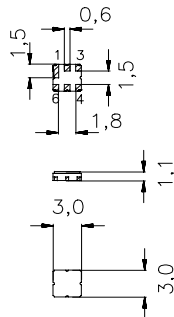
Data Sheet



Features

- Low-loss RF filter for iDEN mobile telephone, receive path
- Low amplitude ripple
- No matching network required for operation at 50 Ω
- Ceramic Package for Surface Mounted Technology (SMT)

Ceramic package **DCC6C**



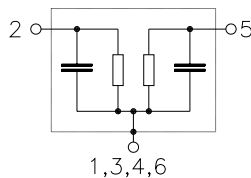
Terminals

- Gold-plated Ni

Dimensions in mm, approx. weight 0,037g

Pin configuration

2	Input
5	Output
1, 3, 4, 6	Case ground



Type	Ordering code	Marking and Package according to	Packing according to
B4165	B39941-B4165-U410	C61157-A7-A67	F61074-V8088-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 30 / + 70	$^{\circ}\text{C}$	source impedance 50 Ω continuous wave
Storage temperature range	T_{stg}	- 40 / + 85	$^{\circ}\text{C}$	
DC voltage	V_{DC}	0	V	
Input power max.	P_{IN}	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:	$Z_L = 50\ \Omega$

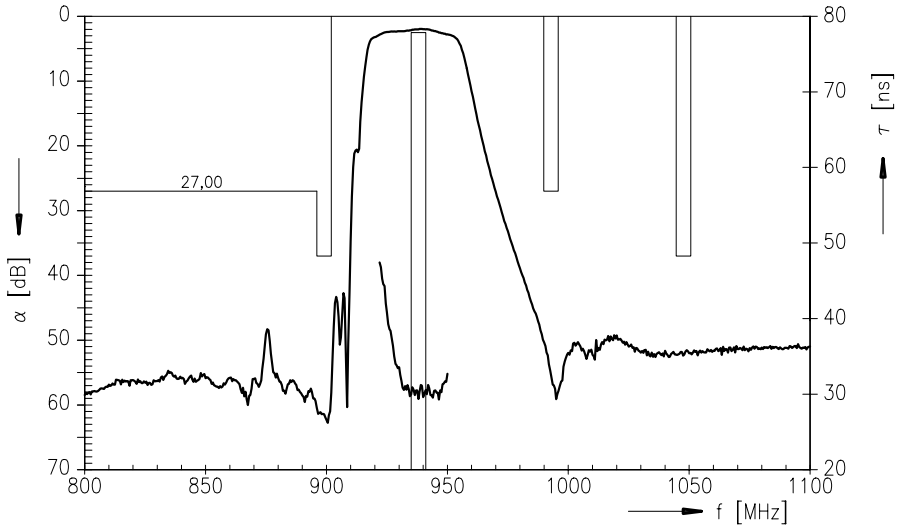
		min.	typ.	max.	
Center frequency	f_c	—	938,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
935,000 ... 941,000 MHz		—	2,1	2,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
935,000 ... 941,000 MHz		—	0,2	1,0	dB
Group delay ripple (p-p)	$\Delta\tau$				
935,000 ... 941,000 MHz		—	3	10	ns
Attenuation	$\alpha_{\min}$				
0,000 ... 896,000 MHz		27	47	—	dB
896,000 ... 902,000 MHz		37	55	—	dB
989,825 ... 995,825 MHz		27	52	—	dB
1044,650 ... 1050,650 MHz		37	52	—	dB
1154,300 ... 1160,300 MHz		47	50	—	dB
1160,300 ... 3200,000 MHz		27	35	—	dB
Input and output return loss					
935,000 ... 941,000 MHz		12	14	—	dB

Characteristics

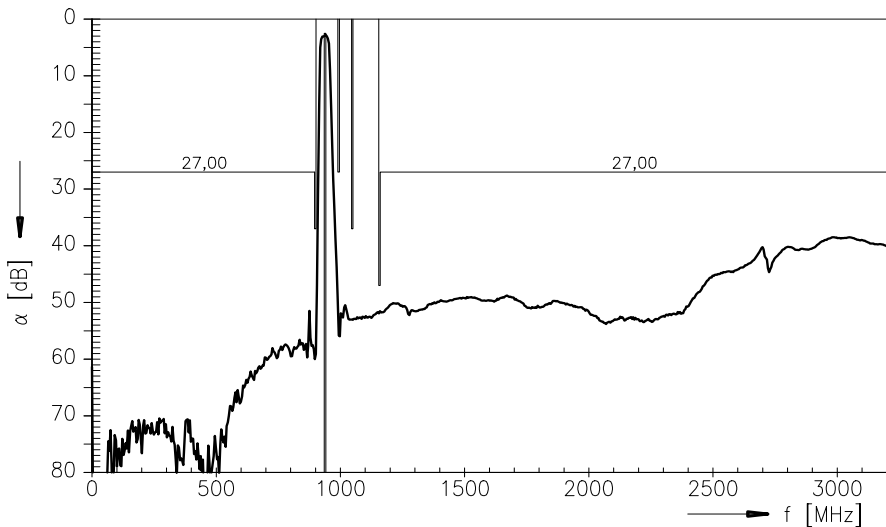
Operating temperature range: $T = -30 \text{ to } +70^{\circ}\text{C}$
Terminating source impedance: $Z_S = 50 \, \Omega$
Terminating load impedance: $Z_L = 50 \, \Omega$

		min.	typ.	max.	
Center frequency	f_c	—	938,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
935,000 ... 941,000 MHz		—	2,5	3,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
935,000 ... 941,000 MHz		—	0,5	1,0	dB
Group delay ripple (p-p)	$\Delta\tau$				
935,000 ... 941,000 MHz		—	3	10	ns
Attenuation	$\alpha_{\min}$				
0,000 ... 896,000 MHz		27	47	—	dB
896,000 ... 902,000 MHz		37	48	—	dB
989,825 ... 995,825 MHz		27	50	—	dB
1044,650 ... 1050,650 MHz		37	51	—	dB
1154,300 ... 1160,300 MHz		47	50	—	dB
1160,300 ... 3200,000 MHz		27	35	—	dB
Input and output return loss					
935,000 ... 941,000 MHz		12	14	—	dB

Transfer function (25+/-2 °C)



Transfer function (wideband)





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