

Data Sheet B4165





# **Low-Loss Filter for Mobile Communication**

938,0 MHz

Ceramic package DCC6C

**Data Sheet** 



#### **Features**

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

# 0,6

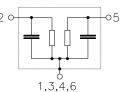
#### **Terminals**

■ Gold-plated Ni

Dimensions in mm, approx. weight 0,037g

# Pin configuration

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



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

Electrostatic Sensitive Device (ESD)

#### Maximum ratings

Operable temperature range	T	- 30 / + 70	°C	
Storage temperature range	$T_{\rm stg}$	- 40 / <b>+</b> 85	°C	
DC voltage	$V_{\rm DC}$	0	V	
Input power max.	$P_{IN}$	0	dBm	source impedance 50 $\Omega$
				continuous wave



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#### Characteristics

Operating temperature range:  $T=25\pm2^{\circ}\mathrm{C}$  Terminating source impedance:  $Z_{\mathrm{S}}=50~\Omega$  Terminating load impedance:  $Z_{\mathrm{L}}=50~\Omega$ 

		min.	typ.	max.	
Center frequency	$f_{\rm C}$	_	938,0	_	MHz
Maximum insertion attenuation			2.4	2.5	dB
935,000 941,000 MHz		_	2,1	2,5	иь
Amplitude ripple (p-p)	$\Delta \alpha$				
935,000 941,000 MHz		_	0,2	1,0	dB
Group delay ripple (p-p)	$\Delta  au$				
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
1044,6501050,650 MHz		37	52	_	dB
1154,3001160,300 MHz		47	50	_	dB
1160,3003200,000 MHz		27	35	_	dB
Input and output return loss					
935,000 941,000 MHz		12	14	_	dB



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#### Characteristics

Operating temperature range:  $T = -30 \text{ to } +70^{\circ}\text{C}$ 

Terminating source impedance:  $Z_{\rm S} = 50~\Omega$ Terminating load impedance:  $Z_{\rm L} = 50~\Omega$ 

		min.	typ.	max.	
Center frequency	f <sub>C</sub>	_	938,0	_	MHz
Maximum insertion attenuation					
935,000 941,000 MHz	$\alpha_{max}$	_	2,5	3,0	dB
Amplitude ripple (p-p)					
935,000 941,000 MHz		_	0,5	1,0	dB
Group delay ripple (p-p)					
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
1044,6501050,650 MHz		37	51	_	dB
1154,3001160,300 MHz		47	50	_	dB
1160,3003200,000 MHz		27	35	_	dB
Input and output return loss					
935,000 941,000 MHz		12	14	_	dB



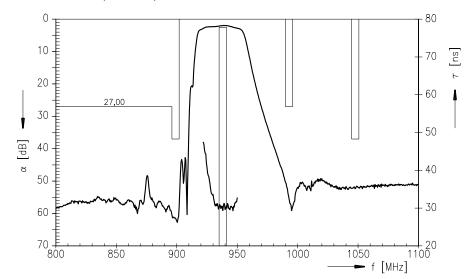
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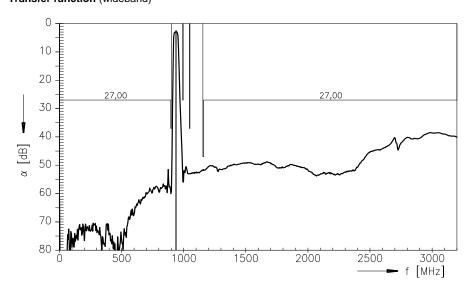
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 $\equiv_{MD}$ 

# Transfer function (25+/-2 °C)



# Transfer function (wideband)





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