



# SAW Components

Data Sheet B4165

Data Sheet

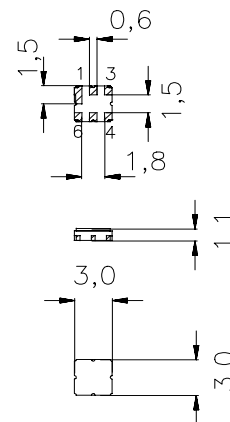


**Features**

- 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**

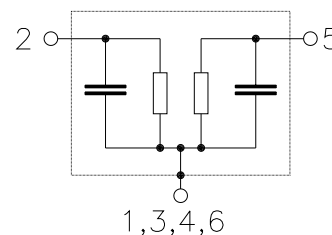
- Gold-plated Ni



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	°C	source impedance 50 Ω continuous wave
Storage temperature range	$T_{stg}$	- 40 / + 85	°C	
DC voltage	$V_{DC}$	0	V	
Input power max.	$P_{IN}$	0	dBm	


**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.	
<b>Center frequency</b>	$f_c$	—	938,0	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$				
	935,000 ... 941,000 MHz	—	2,1	2,5	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$				
	935,000 ... 941,000 MHz	—	0,2	1,0	dB
<b>Group delay ripple (p-p)</b>	$\Delta\tau$				
	935,000 ... 941,000 MHz	—	3	10	ns
<b>Attenuation</b>	$\alpha_{\min}$				
	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
<b>Input and output return loss</b>					
	935,000 ... 941,000 MHz	12	14	—	dB

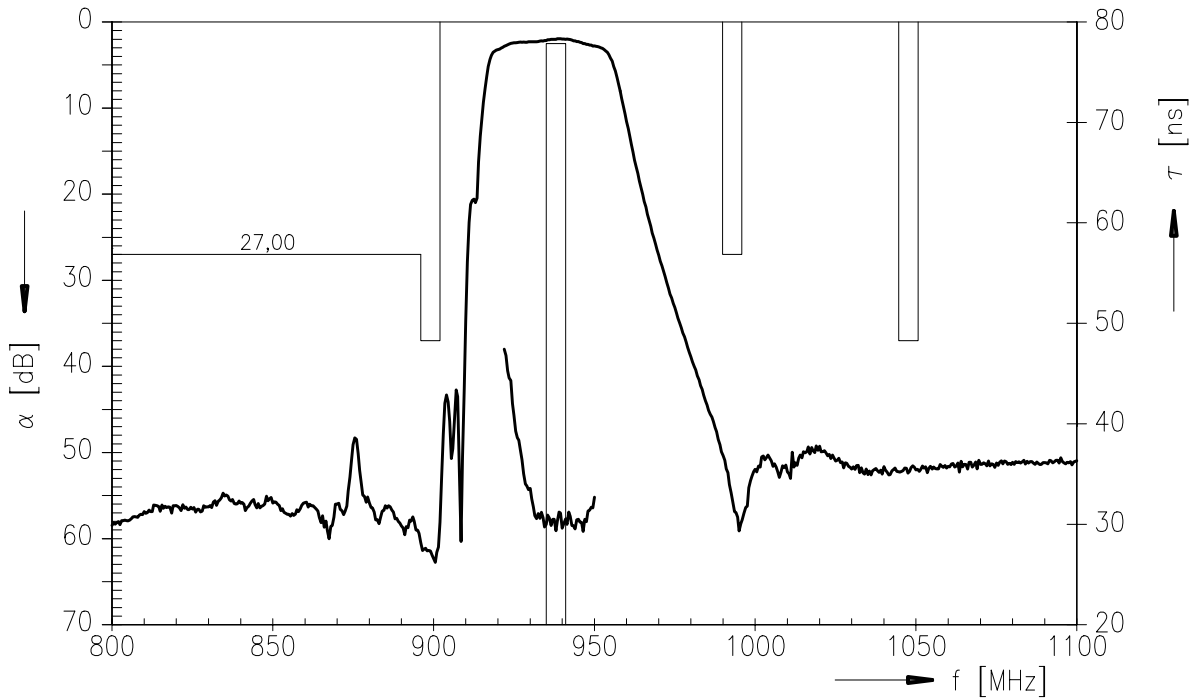

**Characteristics**

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

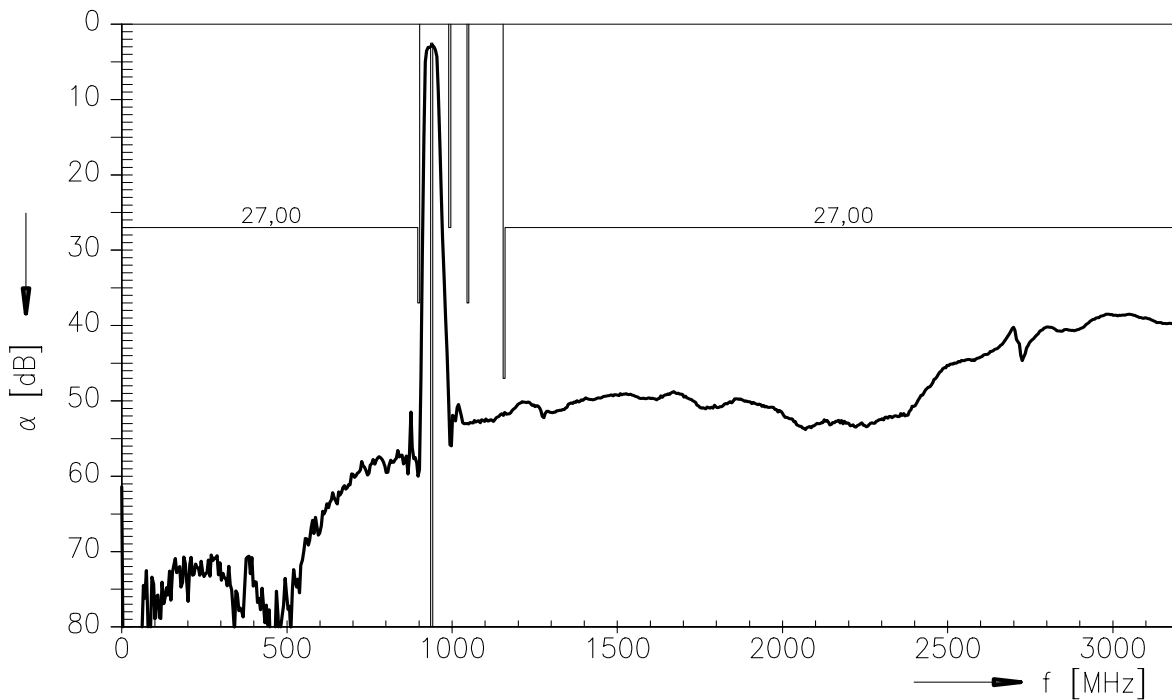
		min.	typ.	max.	
<b>Center frequency</b>	$f_c$	—	938,0	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$	—	2,5	3,0	dB
935,000 ... 941,000 MHz					
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$	—	0,5	1,0	dB
935,000 ... 941,000 MHz					
<b>Group delay ripple (p-p)</b>	$\Delta\tau$	—	3	10	ns
935,000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



Transfer function ( 25+/-2 °C )



Transfer function (wideband)



**Published by EPCOS AG****Surface Acoustic Wave Components Division, SAW MC WT****P.O. Box 80 17 09, D-81617 München**

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