



# SAW Components

Data Sheet B4183





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B4183

Low-Loss Filter for Mobile Communication

1962,5 MHz

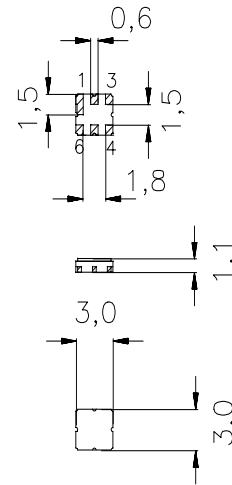
Data sheet



**Features**

- Low-loss RF filter for W-CDMA mobile telephone system, transmit path
- Unbalanced to balanced operation
- Usable passband 125MHz
- Ceramic Package for **Surface Mounted Technology (SMT)**

Ceramic package **DCC6D**



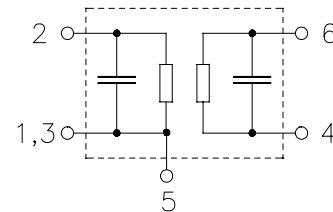
**Terminals**

- Ni, gold-plated

Dimensions in mm, approx. weight 0,037 g

**Pin configuration**

- 2                    Input, unbalanced
- 1, 3                Input ground
- 4, 6                Output, balanced
- 5                    To be grounded
- 1, 3, 5             Case ground



Type	Ordering code	Marking and Package according to	Packing according to
B4183	B39202-B4183-U510	C61157-A7-A68	V61074-V8089-Z000

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

Operable temperature range	$T$	- 30 / + 80	°C	Machine Model, 10 pulses
Storage temperature range	$T_{stg}$	- 40 / + 85	°C	
DC voltage	$V_{DC}$	3	V	
ESD voltage	$V_{ESD}^*$	50*	V	
Source power	$P_{IN}$	5	dBm	

\* -acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses



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**Characteristics**

Operating temperature range:  $T = 25^{\circ}\text{C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega \parallel 3.9\ \text{nH}$   
 Terminating load impedance:  $Z_L = 200\ \Omega \parallel 18.0\ \text{nH}$

		min.	typ.	max.	
<b>Center frequency</b>	$f_c$	—	1962,5	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\text{max}}$				
1900,0 ... 2025,0 MHz		—	3,8	4,2	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$				
1900,0 ... 2025,0 MHz		—	1,4	1,8	dB
<b>Absolute attenuation</b>	$\alpha_{\text{abs}}$				
0,0 ... 1600,0 MHz		30	35	—	dB
1600,0 ... 1800,0 MHz		16	20	—	dB
1800,0 ... 1880,0 MHz		5	10	—	dB
2110,0 ... 6000,0 MHz		20	25	—	dB



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**Characteristics**

Operating temperature range:

$$T = -30 \dots +80^\circ \text{C}$$

Terminating source impedance:

$$Z_S = 50 \Omega \parallel 3.9 \text{ nH}$$

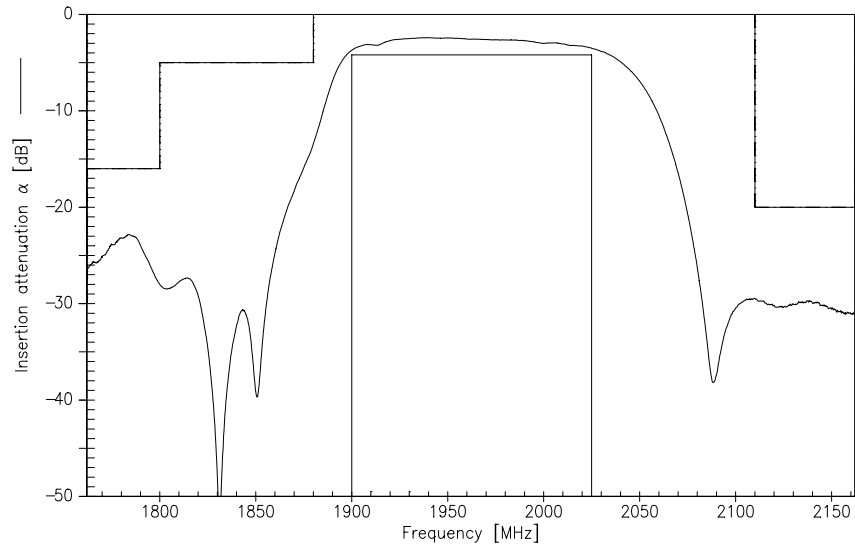
Terminating load impedance:

$$Z_L = 200 \Omega \parallel 18.0 \text{ nH}$$

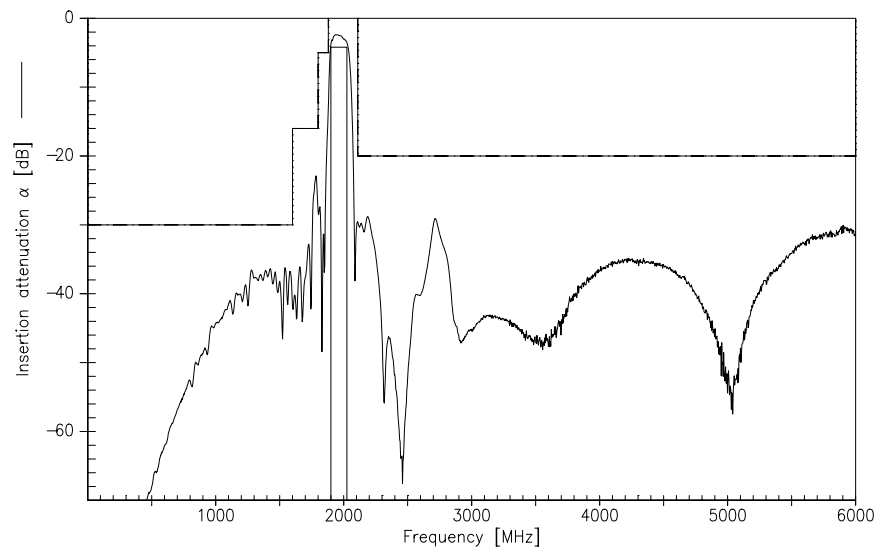
		min.	typ.	max.	
<b>Center frequency</b>	$f_c$	—	1962,5	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$	—	4,2	4,8	dB
1900,0 ... 2025,0 MHz					
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$	—	1,8	2,4	dB
1900,0 ... 2025,0 MHz					
<b>Absolute attenuation</b>	$\alpha_{\text{abs}}$				dB
0,0 ... 1600,0 MHz		30	35	—	
1600,0 ... 1800,0 MHz		16	20	—	
1800,0 ... 1880,0 MHz		5	10	—	
2110,0 ... 6000,0 MHz		20	25	—	



**Transfer function (narrowband) :**



**Transfer function (wideband) :**





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