



SAW Components

Data Sheet B4183





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Low-Loss Filter for Mobile Communication

1962,5 MHz

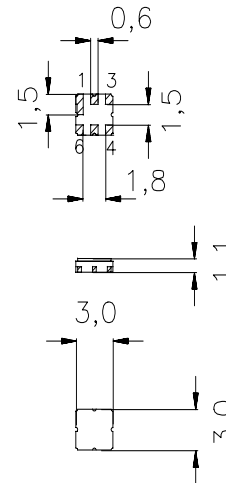
Data sheet



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**



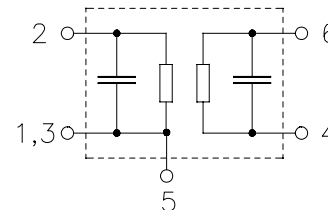
Dimensions in mm, approx. weight 0,037 g

Terminals

- Ni, gold-plated

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.	
Center frequency	f_c	—	1962,5	—	MHz
Maximum insertion attenuation	α_{max}				
1900,0 ... 2025,0 MHz		—	3,8	4,2	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1900,0 ... 2025,0 MHz		—	1,4	1,8	dB
Absolute attenuation	α_{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:

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

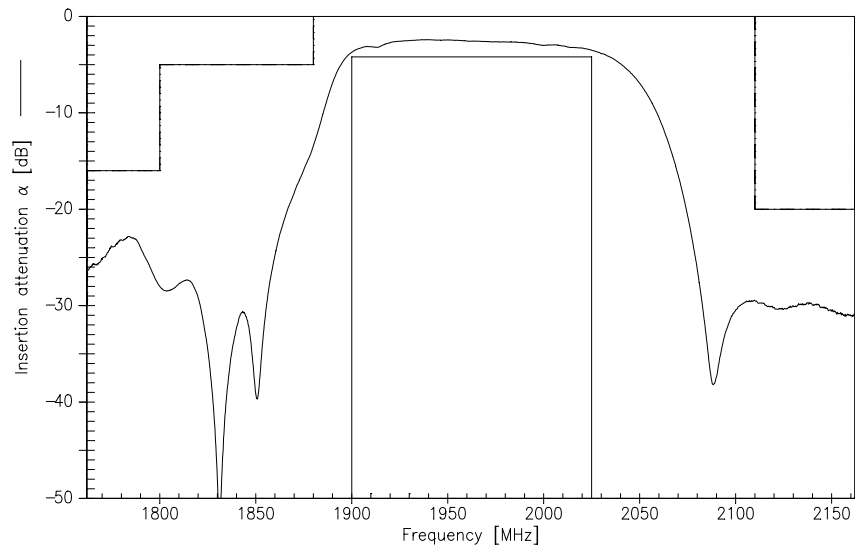
Terminating load impedance:

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

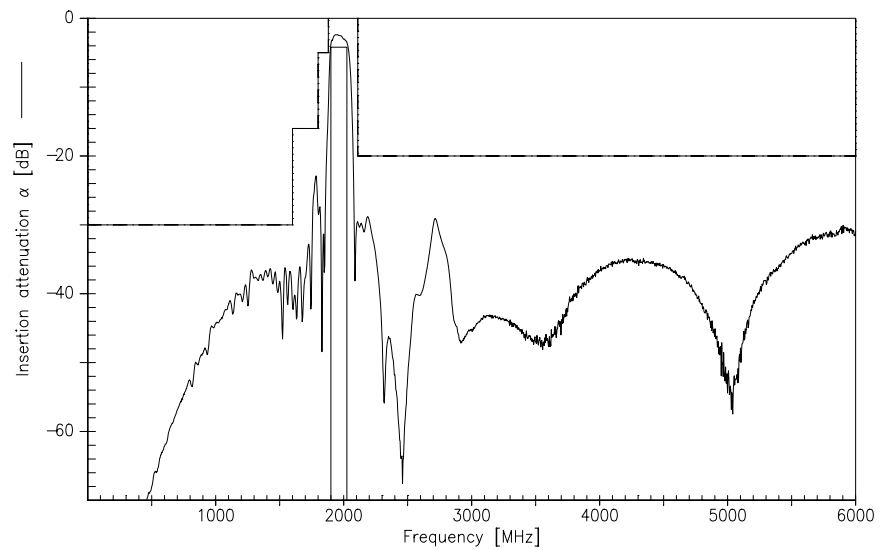
		min.	typ.	max.	
Center frequency	f_c	—	1962,5	—	MHz
Maximum insertion attenuation	α_{\max}	—	4,2	4,8	dB
1900,0 ... 2025,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	1,8	2,4	dB
1900,0 ... 2025,0 MHz					
Absolute attenuation	α_{abs}				dB
0,0 ... 1600,0 MHz		30	35	—	
1600,0 ... 1800,0 MHz		16	20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



Transfer function (narrowband) :



Transfer function (wideband) :





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