Siemens Matsushita Components

SAW Components
Low Loss Filter for Mobile Communication

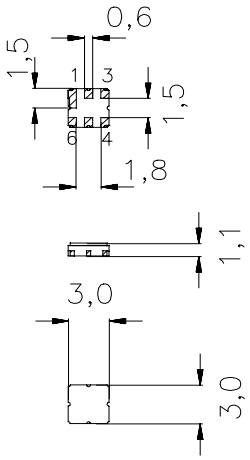
B4137
1842,50 MHz

Data Sheet

Ceramic package **DCC6C**

Features

- Low-loss RF filter for mobile telephone PCN system, receive path
- High selectivity
- Usable passband: 75 MHz
- No matching network required for operation at 50 Ω
- Ceramic Package for **S**urface **M**ounted **T**echnology (**SMT**)



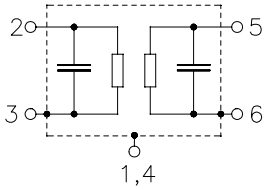
Dimensions in mm, approx. weight 0,037 g

Terminals

- Ni, gold-plated

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B4137	B39182-B4137-U410	C61157-A7-A67	F61074-V8088-Z000

Electrostatic **S**ensitive **D**evice (**ESD**)

Maximum ratings

Operable temperature range	T	– 20 / + 75	˚C	
Storage temperature range	T_{stg}	– 40 / + 85	˚C	
DC voltage	V_{DC}	0	V	
Input power max.				source and load impedance 50 Ω
1710 ... 1785 MHz	P_{IN}	5	dBm	peak power of GSM signal, duty cycle 1 : 8
elsewhere		0	dBm	continuous wave

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Characteristics

Operating temperature range: T = 25 +- 2˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

			min.	typ.	max.	
Center frequency	f_c		—	1842,5	—	MHz
Maximum insertion attenuation	α_{max}					
1805,0 ...1880,0	MHz		—	3,5	4,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
1805,0 ...1880,0	MHz		—	1,9	2,4	dB
Input VSWR						
1805,0 ...1880,0	MHz		—	2,3	2,5	
Output VSWR						
1805,0 ...1880,0	MHz		—	2,3	2,5	
Attenuation	α					
10,0 ... 800,0	MHz		20,0	21,0	—	dB
800,0 ...1500,0	MHz		19,0	20,0	—	dB
1500,0 ...1664,0	MHz		20,0	21,0	—	dB
1664,0 ...1739,0	MHz		22,0	24,0	—	dB
1739,0 ...1760,0	MHz		22,0	28,0	—	dB
1760,0 ...1785,0	MHz		15,0	25,0	—	dB
1920,0 ...1980,0	MHz		20,0	28,0	—	dB
1980,0 ...3328,0	MHz		20,0	23,0	—	dB
3328,0 ...4512,0	MHz		25,0	31,0	—	dB
4512,0 ...5000,0	MHz		20,0	28,0	—	dB
5000,0 ...6000,0	MHz		10,0	20,0	—	dB

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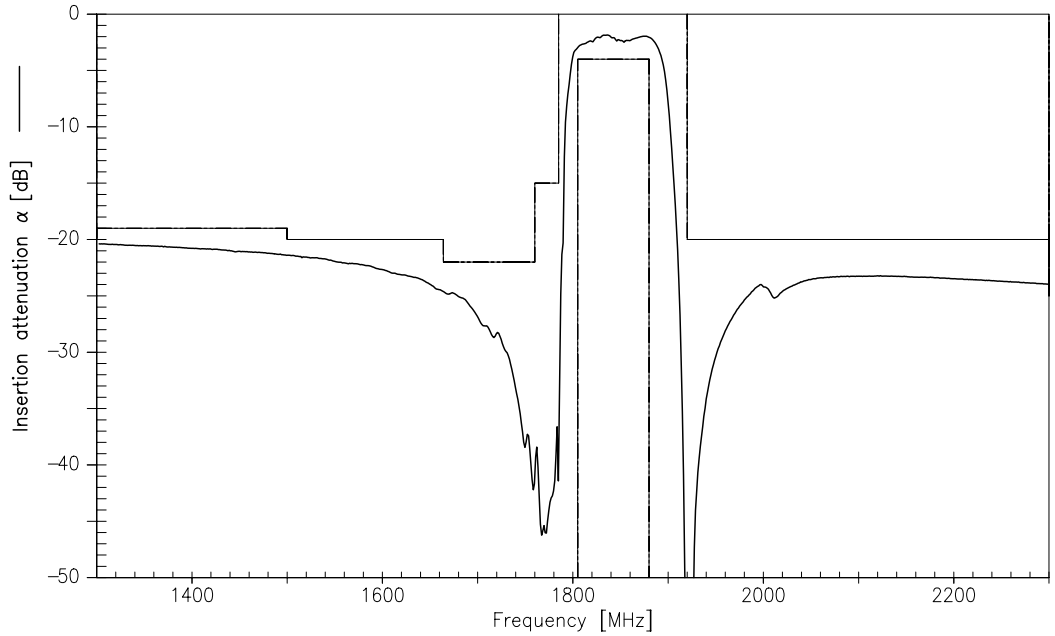
Characteristics

Operating temperature range: T = -20 to +75°C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

			min.	typ.	max.	
Center frequency		f_c	—	1842,5	—	MHz
Maximum insertion attenuation		α_{max}				
1805,0 ...1880,0	MHz		—	4,0	4,5	dB
Amplitude ripple (p-p)		$\Delta\alpha$				
1805,0 ...1880,0	MHz		—	2,4	2,9	dB
Input VSWR						
1805,0 ...1880,0	MHz		—	2,3	2,5	
Output VSWR						
1805,0 ...1880,0	MHz		—	2,3	2,5	
Attenuation		α				
10,0 ... 800,0	MHz		20,0	21,0	—	dB
800,0 ...1500,0	MHz		19,0	20,0	—	dB
1500,0 ...1664,0	MHz		20,0	21,0	—	dB
1664,0 ...1739,0	MHz		22,0	24,0	—	dB
1739,0 ...1760,0	MHz		22,0	28,0	—	dB
1760,0 ...1785,0	MHz		11,0	20,0	—	dB
1920,0 ...1980,0	MHz		20,0	25,0	—	dB
1980,0 ...3328,0	MHz		20,0	23,0	—	dB
3328,0 ...4512,0	MHz		25,0	31,0	—	dB
4512,0 ...5000,0	MHz		20,0	28,0	—	dB
5000,0 ...6000,0	MHz		10,0	20,0	—	dB

Data Sheet

Transfer function (spec for 25°C)



Transfer function (wideband)