Siemens Matsushita Components

SAW Components
Low Loss Filter for Mobile Communication

B4126
1747,5 MHz

Data Sheet

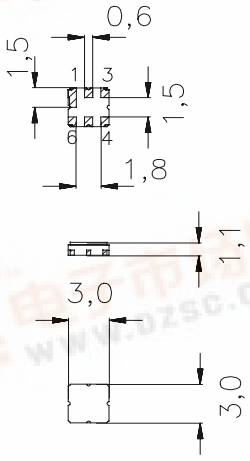
Ceramic package **DCC6C**

Features

- Low-loss RF filter for mobile telephone PCN system, transmit 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**)

Terminals

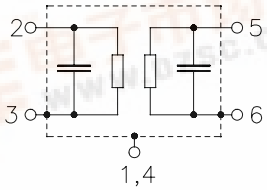
- Ni, gold-plated



Dimensions in mm, approx. weight 0,037 g

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
B4126	B39172-B4126-U410	C61157-A7-A67	F61074-V8088-Z000

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

Maximum ratings

Operable temperature range	T	– 20 / + 70	°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	—	1747,5	—	MHz
Maximum insertion attenuation			α_{max}				
	1710,0	...1785,0	MHz	—	3,5	4,0	dB
Amplitude ripple (p-p)			$\Delta\alpha$				
	1710,0	...1785,0	MHz	—	2,0	2,5	dB
Input VSWR							
	1710,0	...1785,0	MHz	—	2,3	2,5	
Output VSWR							
	1710,0	...1785,0	MHz	—	2,3	2,5	
Attenuation			α				
	10,0	...1670,0	MHz	15,0	18,0	—	dB
	1670,0	...1690,0	MHz	10,0	25,0	—	dB
	1805,0	...1880,0	MHz	10,0	16,0	—	dB
	1880,0	...4500,0	MHz	15,0	21,0	—	dB
	4500,0	...5200,0	MHz	10,0	19,0	—	dB

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Characteristics

Operating temperature range: T = -20 to +70˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

				min.	typ.	max.	
Center frequency			f_c	—	1747,5	—	MHz
Maximum insertion attenuation			α_{max}				
	1710,0	...1785,0	MHz	—	3,5	4,0	dB
Amplitude ripple (p-p)			$\Delta\alpha$				
	1710,0	...1785,0	MHz	—	2,0	2,5	dB
Input VSWR							
	1710,0	...1785,0	MHz	—	2,3	2,5	
Output VSWR							
	1710,0	...1785,0	MHz	—	2,3	2,5	
Attenuation			α				
	10,0	...1670,0	MHz	15,0	18,0	—	dB
	1670,0	...1690,0	MHz	6,0	17,0	—	dB
	1805,0	...1880,0	MHz	6,0	12,0	—	dB
	1880,0	...4500,0	MHz	15,0	21,0	—	dB
	4500,0	...5200,0	MHz	10,0	19,0	—	dB

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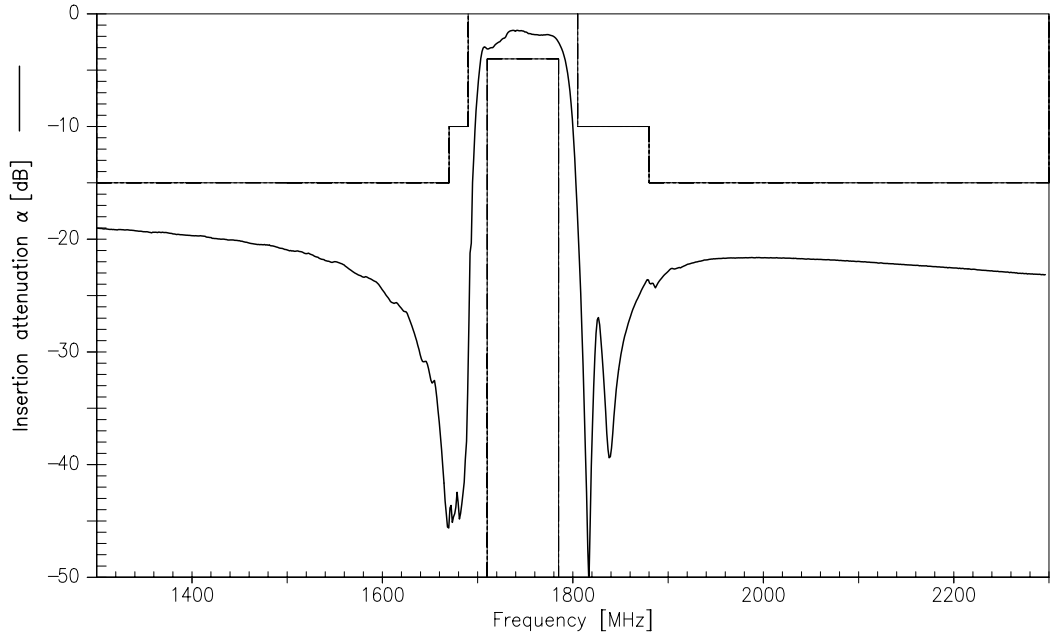
Transfer function (spec for 25°C)



Transfer function (wideband)