Siemens Matsushita Components

SAW Components
Low Loss Filter for Mobile Communication

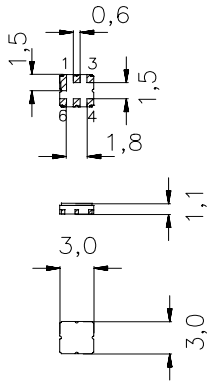
B4127
942,50 MHz

Data Sheet

Ceramic package **DCC6C**

Features

- Low-loss RF filter for mobile telephone EGSM system, receive path
- Low amplitude ripple
- Usable passband 35 MHz
- No matching network required for operation at 50 Ω
- Ceramic Package for **S**urface **M**ounted **T**echnology (**SMT**)



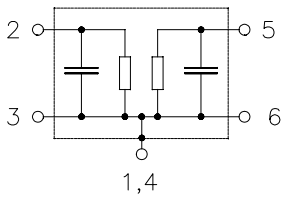
Terminals

- Ni, gold-plated

Dimensions in mm, approx. weight 0,037g

Pin configuration

2	Input
3	Input - ground
5	Output
6	Output - ground
1,4	Case ground



Type	Ordering code	Marking and Package according to	Packing according to
B4127	B39941-B4127-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. 890...915 MHz	P_{IN}	16	dBm	source and load impedance 50 Ω
1710...1785 MHz		13	dBm	peak power of GSM signal, duty cycle 2 : 8
elsewhere		5	dBm	continuous wave

Preliminary format of data sheet.
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OFW EM EU
Oct 1, 1999

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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	—	942,50	—	MHz
Maximum insertion attenuation	α_{max}				
925,0 ... 960,0 MHz		—	2,2	2,7	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
925,0 ... 960,0 MHz		—	0,7	1,2	dB
Input VSWR					
925,0 ... 960,0 MHz		—	2,3	2,5	
Output VSWR					
925,0 ... 960,0 MHz		—	2,3	2,5	
Attenuation	α				
0,0 ... 880,0 MHz		18,0	19,5	—	dB
880,0 ... 905,0 MHz		18,0	25,0	—	dB
905,0 ... 915,0 MHz		15,0	21,0	—	dB
980,0 ...1005,0 MHz		20,0	25,5	—	dB
1005,0 ...1375,0 MHz		18,0	21,0	—	dB
1375,0 ...1410,0 MHz		20,0	21,5	—	dB
1410,0 ...1645,0 MHz		20,0	22,5	—	dB
1645,0 ...3000,0 MHz		20,0	22,5	—	dB
3000,0 ...4008,0 MHz		8,0	14,0	—	dB
Output reflection coefficient @942,5 MHz					
Phase		-95	-83	-71	°

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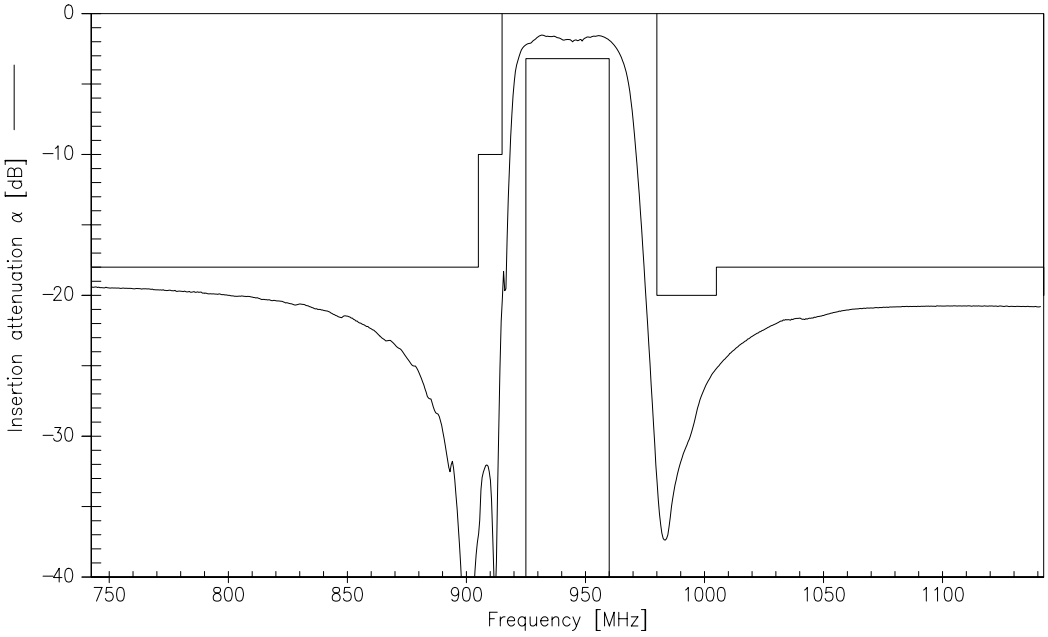
Characteristics

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		—	942,50	—	MHz
Maximum insertion attenuation	α_{max}					
925,0 ... 960,0	MHz		—	2,3	3,2	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
925,0 ... 960,0	MHz		—	0,8	1,7	dB
Input VSWR						
925,0 ... 960,0	MHz		—	2,3	2,5	
Output VSWR						
925,0 ... 960,0	MHz		—	2,3	2,5	
Attenuation	α					
0,0 ... 880,0	MHz		18,0	19,5	—	dB
880,0 ... 905,0	MHz		18,0	25,0	—	dB
905,0 ... 915,0	MHz		10,0	18,0	—	dB
980,0 ...1005,0	MHz		20,0	24,0	—	dB
1005,0 ...1375,0	MHz		18,0	21,0	—	dB
1375,0 ...1410,0	MHz		20,0	21,5	—	dB
1410,0 ...1645,0	MHz		20,0	22,0	—	dB
1645,0 ...3000,0	MHz		20,0	22,0	—	dB
3000,0 ...4008,0	MHz		8,0	14,0	—	dB

Transfer function



Transfer function (wideband)