



SAW Components

Data Sheet B4127

Data Sheet

An abstract, grayscale background graphic featuring a globe with a grid pattern, overlaid with a large, stylized, and slightly blurred "EPCOS" logo. The logo is rendered in a light gray, almost white, color, giving it a three-dimensional appearance as if it's floating or attached to the globe. The overall effect is a high-tech, modern aesthetic.



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Low-Loss Filter for Mobile Communication

942,50 MHz

Data Sheet



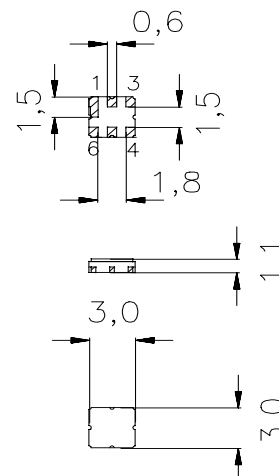
Ceramic package **DCC6C**

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 **Surface Mounted Technology (SMT)**
- RoHS Compliant

Terminals

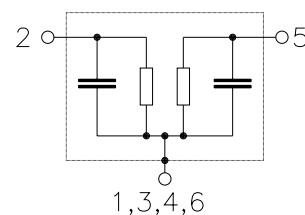
- Ni, gold-plated



Dimensions in mm, approx. weight 0,037 g

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B4127	B39941-B4127-U410	C61157-A7-A67	F61074-V8168-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 40 / + 85	$^{\circ}\text{C}$	
Storage temperature range	T_{stg}	- 40 / + 85	$^{\circ}\text{C}$	
DC voltage	V_{DC}	0	V	
ESD voltage	V_{ESD}	100	V	Machine Model, 10 pulses ¹⁾
Input power max				
890...915 MHz		16	dBm	source and load impedance 50 Ω
1710...1785 MHz	P_{IN}	13	dBm	peak power of GSM signal, duty cycle 2 : 8
elsewhere		5	dBm	continuous wave

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



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Characteristics

Operating temperature range: $T = 25 \pm 2^\circ \text{C}$
Terminating source impedance: $Z_S = 50 \Omega$
Terminating load impedance: $Z_L = 50 \Omega$

		min.	typ.	max.	
Center frequency	f_c	—	942,50	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
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 $+75^{\circ}\text{C}$
Terminating source impedance: $Z_S = 50\ \Omega$
Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ.	max.	
Center frequency	f_c	—	942,50	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$	—	2,3	3,2	dB
925,0 ... 960,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,8	1,7	dB
925,0 ... 960,0 MHz					
Input VSWR		—	2,3	2,5	
925,0 ... 960,0 MHz					
Output VSWR		—	2,3	2,5	
925,0 ... 960,0 MHz					
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



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Characteristics

Operating temperature range: $T = -30$ to $+85^{\circ}\text{C}$
Terminating source impedance: $Z_S = 50\ \Omega$
Terminating load impedance: $Z_L = 50\ \Omega$

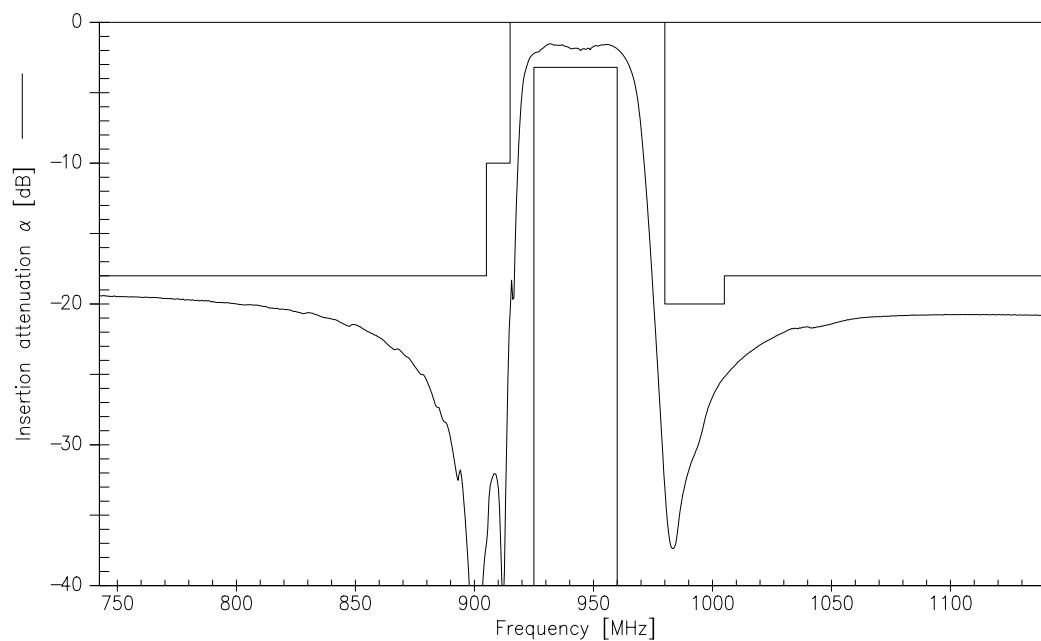
		min.	typ.	max.	
Center frequency	f_c	—	942,50	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$	—	2,3	3,6	dB
925,0 ... 960,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,8	2,1	dB
925,0 ... 960,0 MHz					
Input VSWR		—	2,3	2,5	
925,0 ... 960,0 MHz					
Output VSWR		—	2,3	2,5	
925,0 ... 960,0 MHz					
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		9,0	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



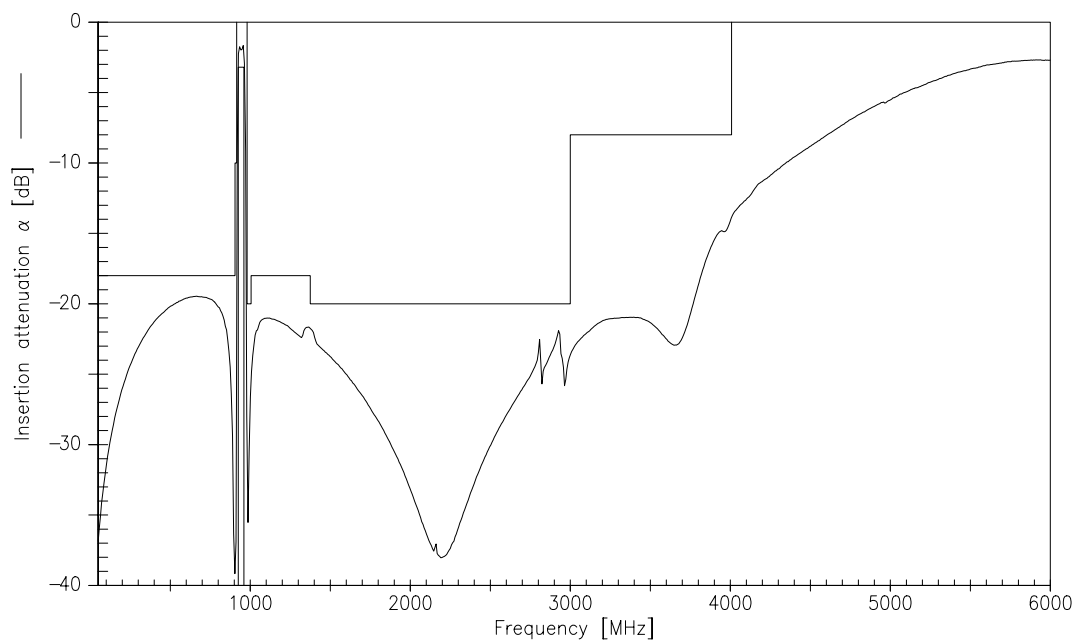
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Transfer function (narrowband)



Transfer function (wideband)





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