EPCOS

SAW Components

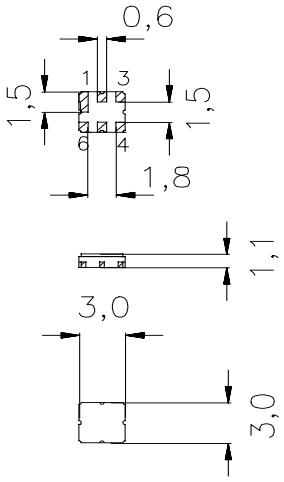
Data Sheet B4127

Data Sheet SMD

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**)
- RoHS Compliant



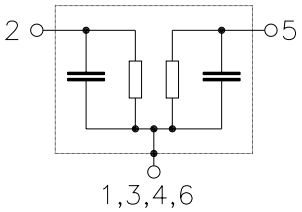
Dimensions in mm, approx. weight 0,037 g

Terminals

- Ni, gold-plated

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

Maximum ratings

Operable temperature range	T	– 40 / + 85	˚C	
Storage temperature range	T_{stg}	– 40 / + 85	˚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

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	°

Characteristics

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

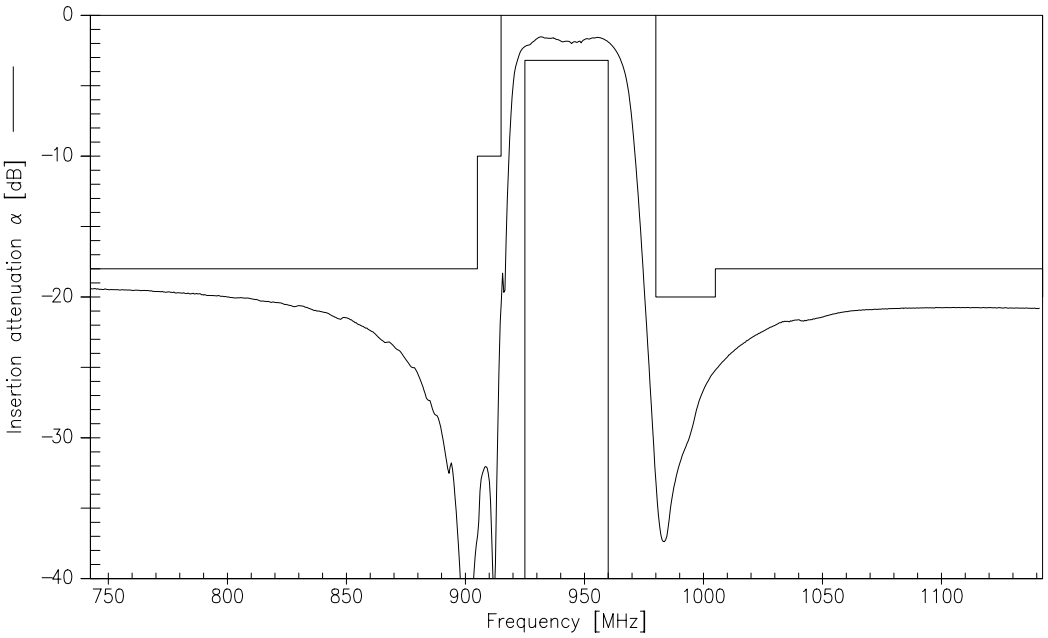
			min.	typ.	max.	
Center frequency		f_c	—	942,50	—	MHz
Maximum insertion attenuation		α_{max}				
	925,0 ... 960,0 MHz		—	2,3	3,2	dB
Amplitude ripple (p-p)		$\Delta\alpha$				
	925,0 ... 960,0 MHz		—	0,8	1,7	dB
Input VSWR						
	925,0 ... 960,0 MHz		—	2,3	2,5	
Output VSWR						
	925,0 ... 960,0 MHz		—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

Characteristics

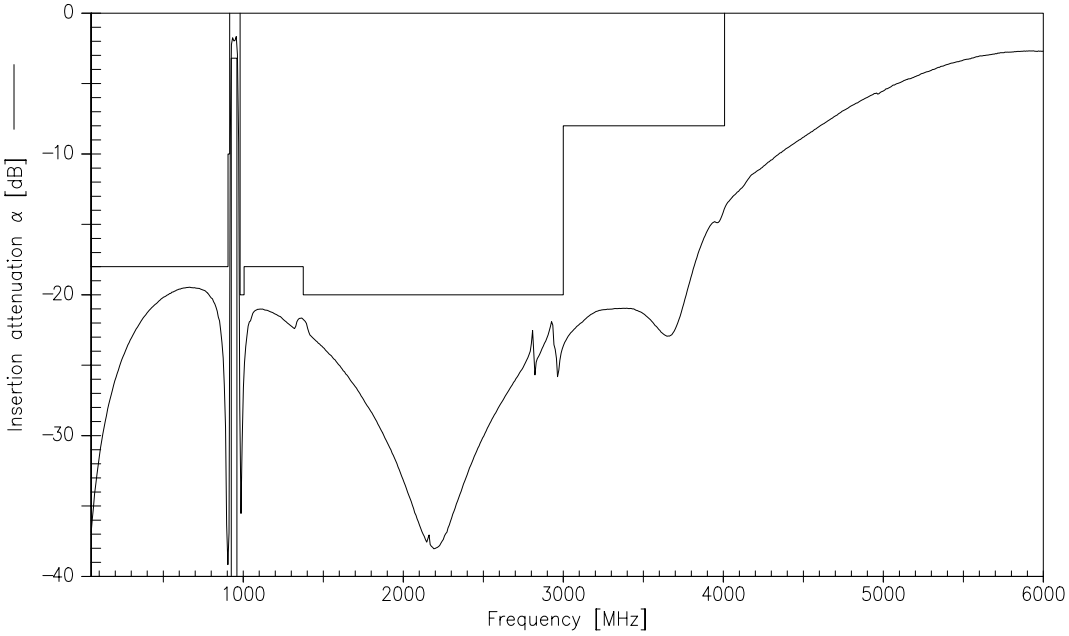
Operating temperature range: T = -30 to +85˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

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

Transfer function (narrowband)



Transfer function (wideband)



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