EPCOS

SAW Components

Data Sheet B4148

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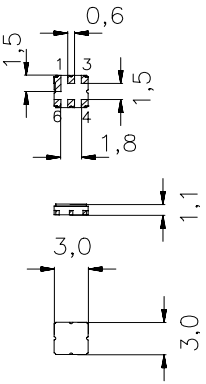
Ceramic package **DCC6C**

Features

- Low-loss RF filter for mobile telephone PCS systems, receive path
- Usable passband 60 MHz
- No matching network required for operation at 50 Ω
- Ceramic Package for **S**urface **M**ounted **T**echnology (**SMT**)



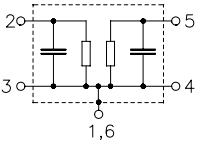
Terminals

- Ni, gold-plated

Dimensions in mm, approx. weight 0,037 g

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B4148	B39202-B4148-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
	P_{IN}	15	dBm	peak power of GSM signal, duty cycle 1 : 8
		10	dBm	CDMA signal

Data Sheet SMD

Characteristics

Operating temperature range: T = +25 +- 5˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Center frequency	f_c	—	1960,0	—	MHz
Maximum insertion attenuation	α_{max}				
1930,0 ...1990,0 MHz		—	2,8	3,3	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1930,0 ...1990,0 MHz		—	1,3	2,0	dB
Input VSWR					
1930,0 ...1990,0 MHz		—	1,8	2,1	
Output VSWR					
1930,0 ...1990,0 MHz		—	1,8	2,1	
Attenuation	α				
10,0 ... 600,0 MHz		20,0	22,0	—	dB
600,0 ...1500,0 MHz		18,0	19,5	—	dB
1500,0 ...1850,0 MHz		20,0	22,0	—	dB
1850,0 ...1910,0 MHz		11,0	21,0	—	dB
2010,0 ...2070,0 MHz		10,0	17,0	—	dB
2070,0 ...5000,0 MHz		20,0	23,0	—	dB
5000,0 ...6000,0 MHz		10,0	18,0	—	dB

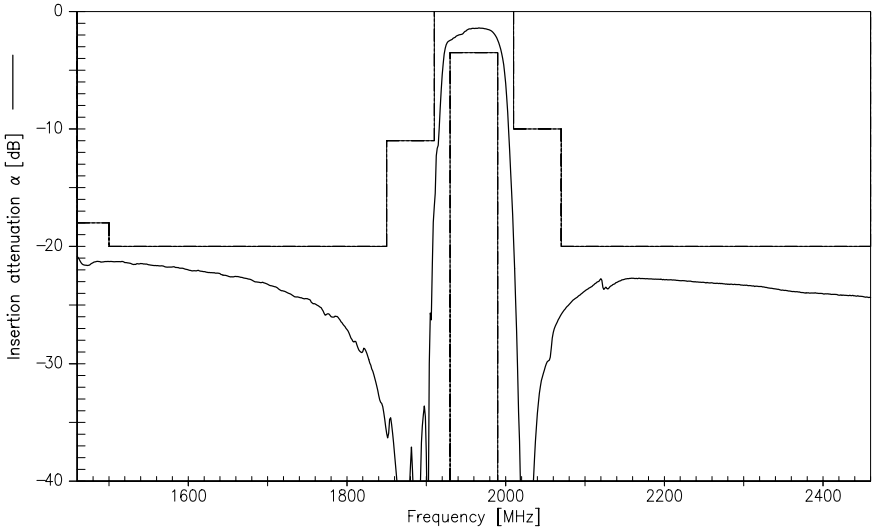
Data Sheet SMD

Characteristics

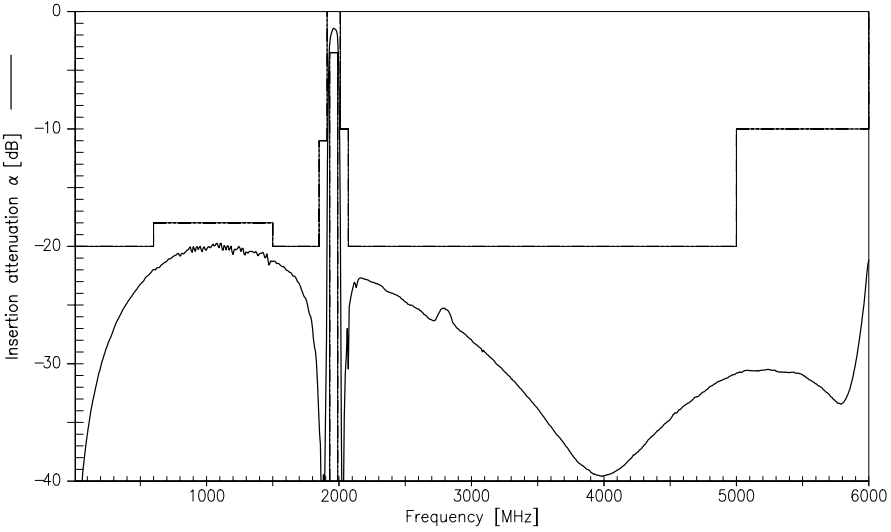
Operating temperature range: T = -20 to +75˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Center frequency	f_c	—	1960,0	—	MHz
Maximum insertion attenuation	α_{max}				
1930,0 ...1990,0 MHz		—	3,1	4,3	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1930,0 ...1990,0 MHz		—	1,6	2,8	dB
Input VSWR					
1930,0 ...1990,0 MHz		—	1,8	2,1	
Output VSWR					
1930,0 ...1990,0 MHz		—	1,8	2,1	
Attenuation	α				
10,0 ... 600,0 MHz		20,0	22,0	—	dB
600,0 ...1500,0 MHz		18,0	19,5	—	dB
1500,0 ...1850,0 MHz		20,0	22,0	—	dB
1850,0 ...1910,0 MHz		8,5	16,5	—	dB
2010,0 ...2070,0 MHz		7,0	13,0	—	dB
2070,0 ...5000,0 MHz		20,0	23,0	—	dB
5000,0 ...6000,0 MHz		10,0	18,0	—	dB

Transfer Function(25˚C spec)

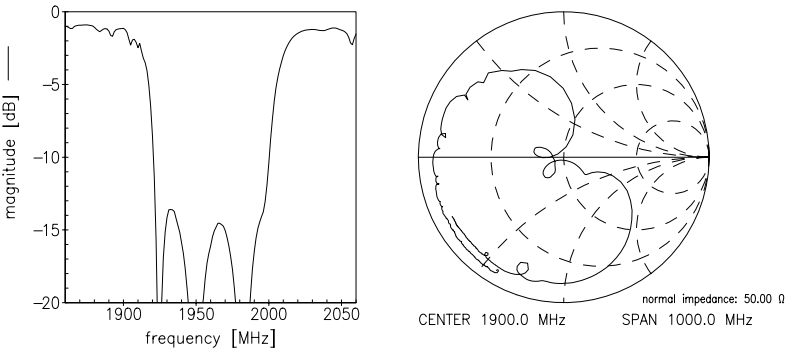


Transfer function (wideband)

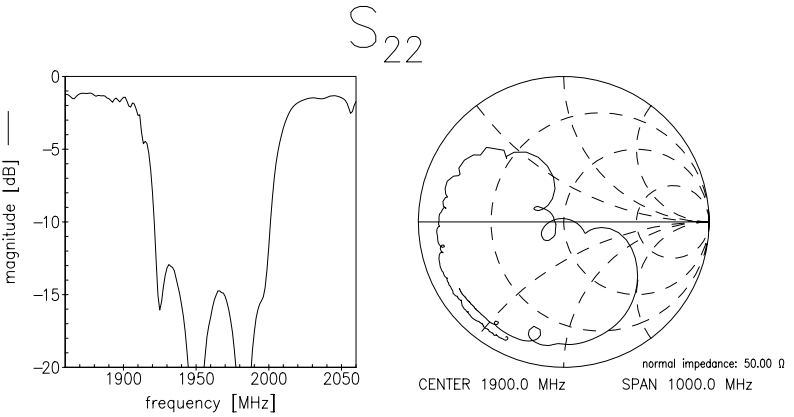


Reflection functions

S_{11}



S_{22}



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