SAW Components

Data Sheet B4148

.

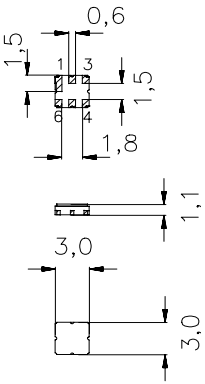
Ceramic package **DCC6C**

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

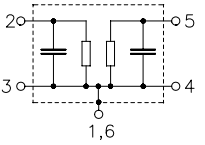
- Ni, gold-plated



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

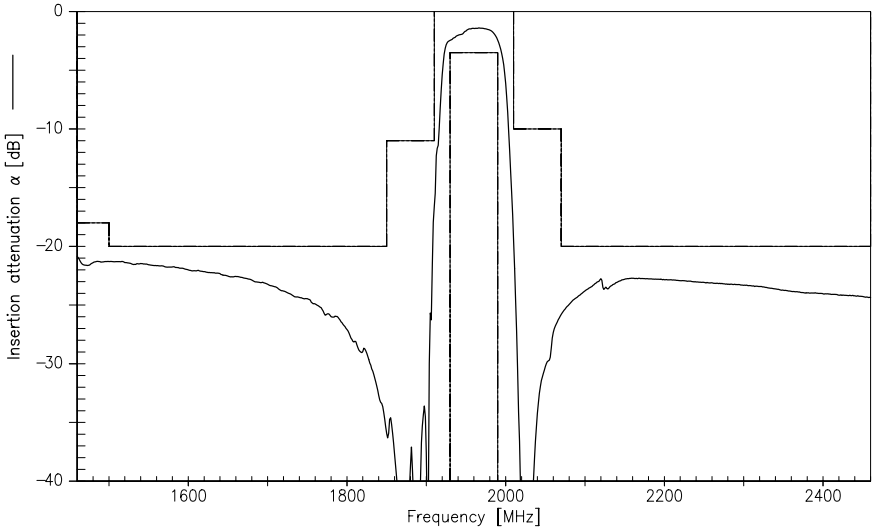
		min.	typ.	max.	
Center frequency	f_c	—	1960,0	—	MHz
Maximum insertion attenuation	α_{max}				
1930,0 ...1990,0 MHz		—	2,8	3,3	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1930,0 ...1990,0 MHz		—	1,3	2,0	dB
Input VSWR					
1930,0 ...1990,0 MHz		—	1,8	2,1	
Output VSWR					
1930,0 ...1990,0 MHz		—	1,8	2,1	
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

Characteristics

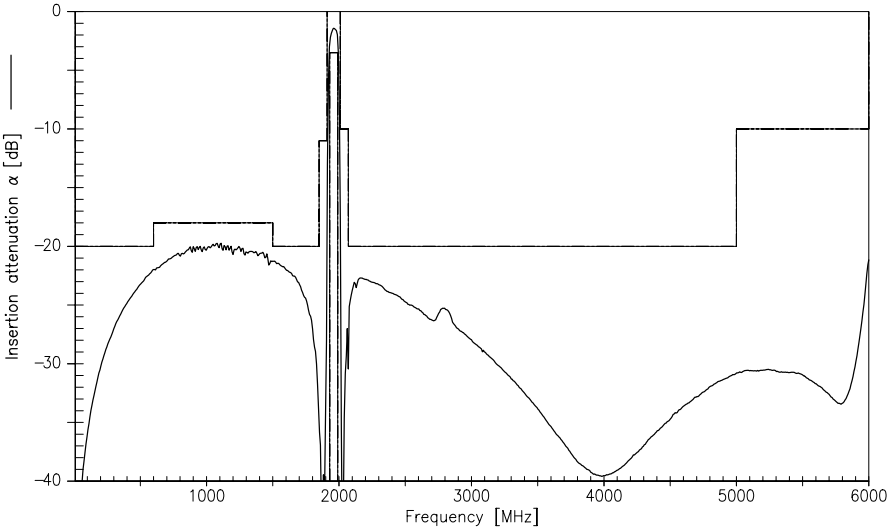
Operating temperature range: T = -20 to +75˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		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)

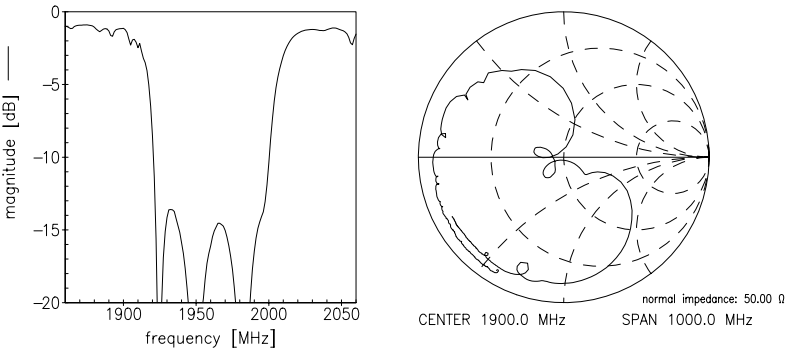


Transfer function (wideband)

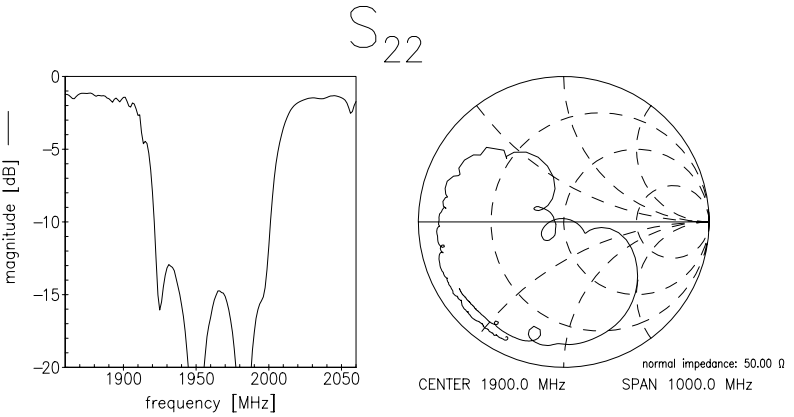


Reflection functions

S_{11}



S_{22}



Published by EPCOS AG
Surface Acoustic Wave Components Division, OFW E MF
P.O. Box 80 17 09, D-81617 München

As far as patents or other rights of third parties are concerned, liability is only assumed for components per se, not for applications, processes and circuits implemented within components or assemblies.

The information describes the type of component and shall not be considered as assured characteristics.
Terms of delivery and rights to change design reserved.

For questions on technology, prices and delivery please contact the sales offices of EPCOS AG or the international representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our sales offices.