EPCOS

SAW Components

Data Sheet B4166

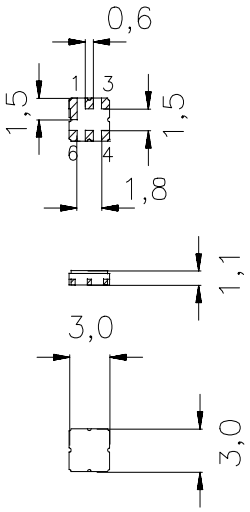
Ceramic package **DCC6C**

Features

- Low-loss RF filter for mobile telephone PCN system, receive path
- High selectivity
- Usable passband: 75 MHz
- No matching network required for operation at 50 Ω
- Ceramic Package for **S**urface **M**ounted **T**echnology (**SMT**)

Terminals

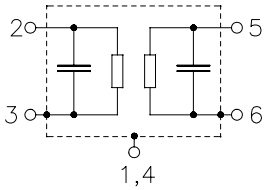
- Ni, gold-plated



Dimensions in mm, approx. weight 0,05 g

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B4166	B39182-B4166-U410	C61157-A7-A67	F61074-V8088-Z000

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

Maximum ratings

Operable temperature range	T	– 20 / + 80	˚C	
Storage temperature range	T_{stg}	– 40 / + 85	˚C	
DC voltage	V_{DC}	5	V	
Input power max.	P_{IN}			source/load impedance 50Ω/50Ω
1710,0 ... 1785,0 MHz		13	dBm	peak power of GSM signal duty cycle 1:8

Characteristics

Operating temperature range: T = 25 +- 2˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

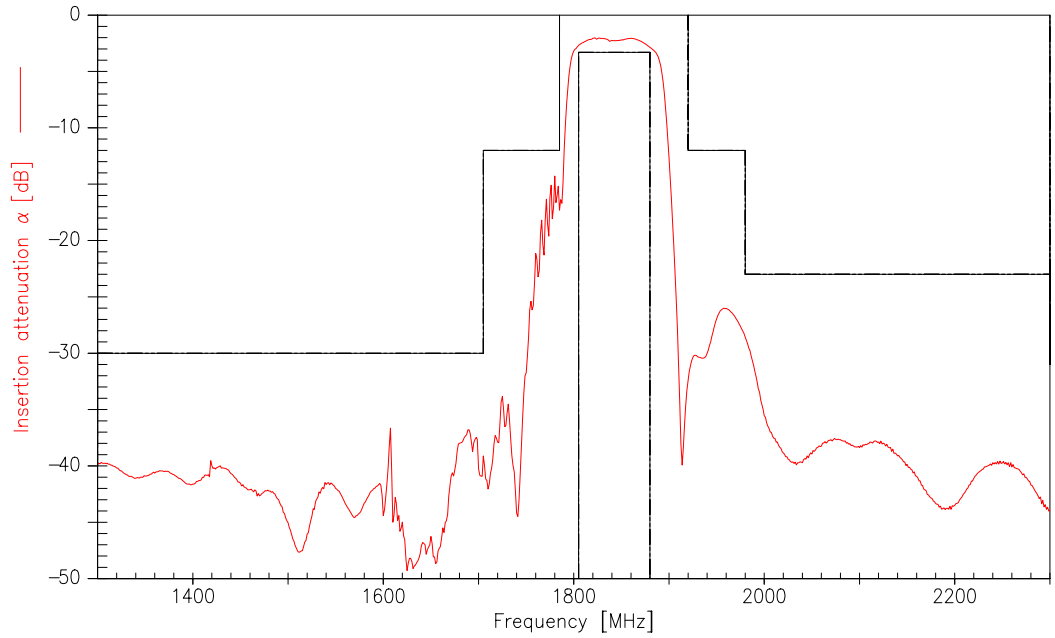
			min.	typ.	max.	
Center frequency		f_c	—	1842,5	—	MHz
Maximum insertion attenuation		α_{max}				
1805,0	...1880,0 MHz		—	2,9	3,3	dB
Amplitude ripple (p-p)		$\Delta\alpha$				
1805,0	...1880,0 MHz		—	0,9	1,3	dB
Input VSWR						
1805,0	...1880,0 MHz		—	2,0	2,2	dB
Output VSWR						
1805,0	...1880,0 MHz		—	2,2	2,4	dB
Attenuation		α				
10,0	... 370,0 MHz		40,0	43,5	—	dB
370,0	...1300,0 MHz		37,0	38,5	—	dB
1300,0	...1705,0 MHz		30,0	36,0	—	dB
1705,0	...1785,0 MHz		12,0	14,0	—	dB
1920,0	...1980,0 MHz		12,0	25,0	—	dB
1980,0	...2530,0 MHz		23,0	28,0	—	dB
2530,0	...2680,0 MHz		31,0	35,0	—	dB
2680,0	...3400,0 MHz		28,0	34,0	—	dB
3400,0	...3975,0 MHz		24,0	30,0	—	dB
3975,0	...4200,0 MHz		23,0	27,0	—	dB
4200,0	...4920,0 MHz		15,0	19,0	—	dB
4920,0	...5200,0 MHz		10,0	17,0	—	dB
5200,0	...6000,0 MHz		5,0	11,0	—	dB

Characteristics

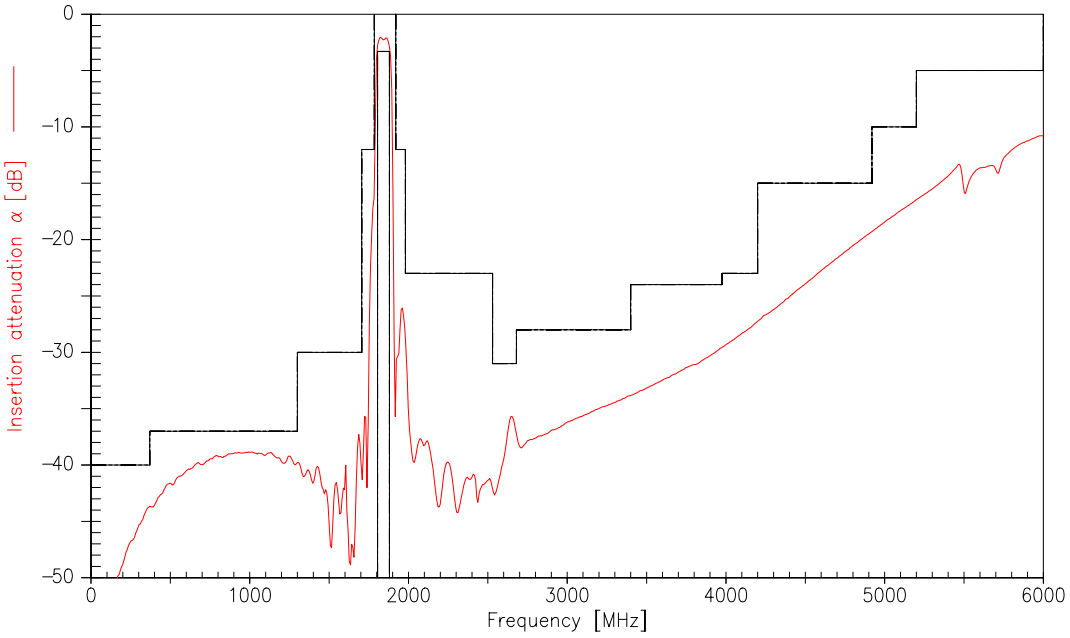
Operating temperature range: T = -20 to +80˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

				min.	typ.	max.	
Center frequency			f_c	—	1842,5	—	MHz
Maximum insertion attenuation			α_{max}				
	1805,0	...1880,0	MHz	—	3,2	3,9	dB
Amplitude ripple (p-p)			$\Delta\alpha$				
	1805,0	...1880,0	MHz	—	1,2	1,9	dB
Input VSWR							
	1805,0	...1880,0	MHz	—	2,1	2,3	dB
Output VSWR							
	1805,0	...1880,0	MHz	—	2,3	2,5	dB
Attenuation			α				
	10,0	... 370,0	MHz	40,0	43,5	—	dB
	370,0	...1300,0	MHz	37,0	38,5	—	dB
	1300,0	...1705,0	MHz	30,0	36,0	—	dB
	1705,0	...1785,0	MHz	10,0	13,0	—	dB
	1920,0	...1980,0	MHz	10,0	25,0	—	dB
	1980,0	...2530,0	MHz	23,0	28,0	—	dB
	2530,0	...2680,0	MHz	31,0	35,0	—	dB
	2680,0	...3400,0	MHz	28,0	34,0	—	dB
	3400,0	...3975,0	MHz	24,0	30,0	—	dB
	3975,0	...4200,0	MHz	23,0	27,0	—	dB
	4200,0	...4920,0	MHz	15,0	19,0	—	dB
	4920,0	...5200,0	MHz	10,0	17,0	—	dB
	5200,0	...6000,0	MHz	5,0	11,0	—	dB

Transfer function (spec for 25°C)



Transfer function (wideband)



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