EPCOS

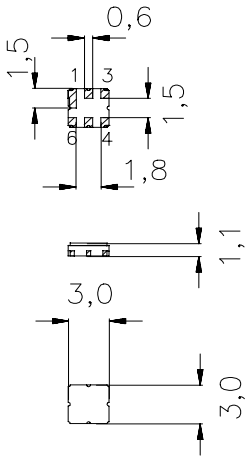
SAW Components

Data Sheet B4129

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**)



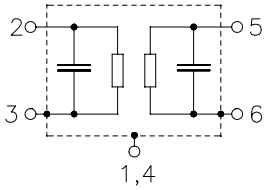
Terminals

- Ni, gold-plated

Dimensions in mm, approx. weight 0,037 g

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B4129	B39182-B4129-U410	C61157-A7-A67	F61074-V8088-Z000

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

Maximum ratings

Operable temperature range	T	– 30 / + 80	˚C	
Storage temperature range	T_{stg}	– 40 / + 85	˚C	
DC voltage	V_{DC}	0	V	
ESD voltage	V_{ESD}	50	V	
Input power max.				source and load impedance 50 Ω
1710 ... 1785 MHz	P_{IN}	15	dBm	peak power of GSM signal, duty cycle 1 : 8
1805 ... 1880 MHz		10	dBm	continuous wave
elsewhere		0	dBm	continuous wave

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		—	3,0	3,5	dB
Amplitude ripple (p-p)		$\Delta\alpha$				
	1805,0 ...1880,0 MHz		—	1,3	1,8	dB
Input VSWR						
	1805,0 ...1880,0 MHz		—	2,1	2,4	
Output VSWR						
	1805,0 ...1880,0 MHz		—	2,1	2,4	
Attenuation		α				
	10,0 ... 800,0 MHz		20,0	21,0	—	dB
	800,0 ...1500,0 MHz		19,0	20,0	—	dB
	1500,0 ...1705,0 MHz		20,0	21,0	—	dB
	1705,0 ...1760,0 MHz		20,0	25,0	—	dB
	1760,0 ...1785,0 MHz		12,0	22,0	—	dB
	1920,0 ...1980,0 MHz		20,0	25,0	—	dB
	1980,0 ...3120,0 MHz		20,0	22,0	—	dB
	3120,0 ...5000,0 MHz		20,0	25,0	—	dB
	5000,0 ...6000,0 MHz		10,0	20,0	—	dB

Characteristics

Operating temperature range: T = +10 to +60˚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	3,5	dB
Amplitude ripple (p-p)		$\Delta\alpha$				
	1805,0 ...1880,0 MHz		—	1,5	1,8	dB
Input VSWR						
	1805,0 ...1880,0 MHz		—	2,1	2,4	
Output VSWR						
	1805,0 ...1880,0 MHz		—	2,1	2,4	
Attenuation		α				
	10,0 ... 800,0 MHz		20,0	21,0	—	dB
	800,0 ...1500,0 MHz		19,0	20,0	—	dB
	1500,0 ...1705,0 MHz		20,0	21,0	—	dB
	1705,0 ...1760,0 MHz		20,0	25,0	—	dB
	1760,0 ...1785,0 MHz		10,0	18,0	—	dB
	1920,0 ...1980,0 MHz		20,0	25,0	—	dB
	1980,0 ...3120,0 MHz		20,0	22,0	—	dB
	3120,0 ...5000,0 MHz		20,0	25,0	—	dB
	5000,0 ...6000,0 MHz		10,0	20,0	—	dB

Characteristics

Operating temperature range: T = -10 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		—	3,3	3,5	dB
Amplitude ripple (p-p)		$\Delta\alpha$				
	1805,0 ...1880,0 MHz		—	1,6	1,8	dB
Input VSWR						
	1805,0 ...1880,0 MHz		—	2,1	2,4	
Output VSWR						
	1805,0 ...1880,0 MHz		—	2,1	2,4	
Attenuation		α				
	10,0 ... 800,0 MHz		20,0	21,0	—	dB
	800,0 ...1500,0 MHz		19,0	20,0	—	dB
	1500,0 ...1705,0 MHz		20,0	21,0	—	dB
	1705,0 ...1760,0 MHz		20,0	25,0	—	dB
	1760,0 ...1785,0 MHz		8,0	16,0	—	dB
	1920,0 ...1980,0 MHz		20,0	25,0	—	dB
	1980,0 ...3120,0 MHz		20,0	22,0	—	dB
	3120,0 ...5000,0 MHz		20,0	25,0	—	dB
	5000,0 ...6000,0 MHz		10,0	20,0	—	dB

Characteristics

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

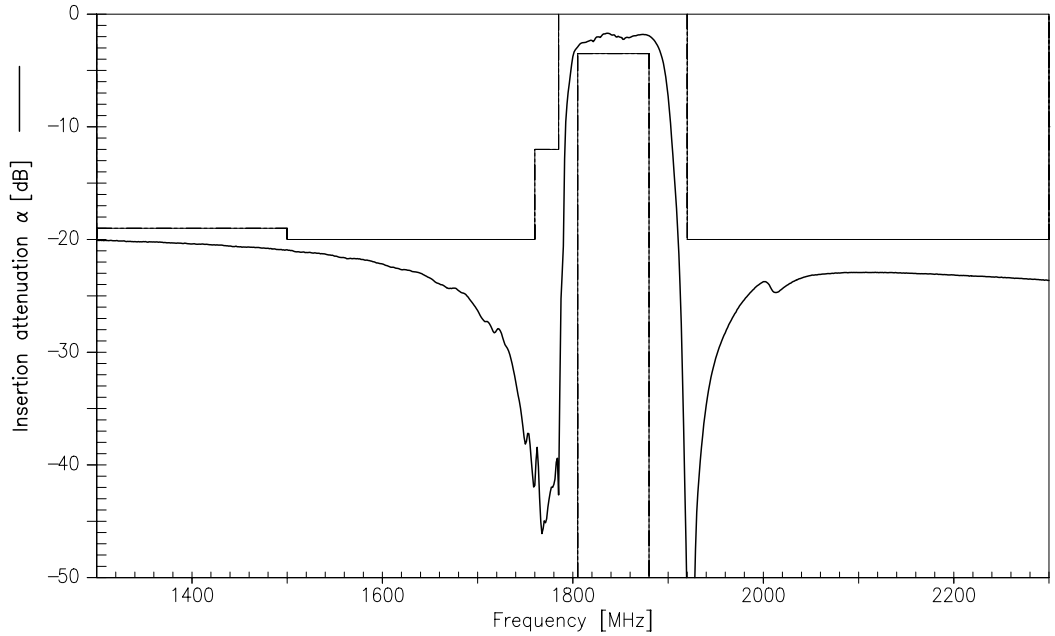
			min.	typ.	max.	
Center frequency		f_c	—	1842,5	—	MHz
Maximum insertion attenuation		α_{max}				
	1805,0 ...1880,0 MHz		—	3,6	3,8	dB
Amplitude ripple (p-p)		$\Delta\alpha$				
	1805,0 ...1880,0 MHz		—	1,9	2,1	dB
Input VSWR						
	1805,0 ...1880,0 MHz		—	2,1	2,4	
Output VSWR						
	1805,0 ...1880,0 MHz		—	2,1	2,4	
Attenuation		α				
	10,0 ... 800,0 MHz		20,0	21,0	—	dB
	800,0 ...1500,0 MHz		19,0	20,0	—	dB
	1500,0 ...1705,0 MHz		20,0	21,0	—	dB
	1705,0 ...1760,0 MHz		20,0	25,0	—	dB
	1760,0 ...1785,0 MHz		8,0	16,0	—	dB
	1920,0 ...1980,0 MHz		20,0	25,0	—	dB
	1980,0 ...3120,0 MHz		20,0	22,0	—	dB
	3120,0 ...5000,0 MHz		20,0	25,0	—	dB
	5000,0 ...6000,0 MHz		10,0	20,0	—	dB

Characteristics

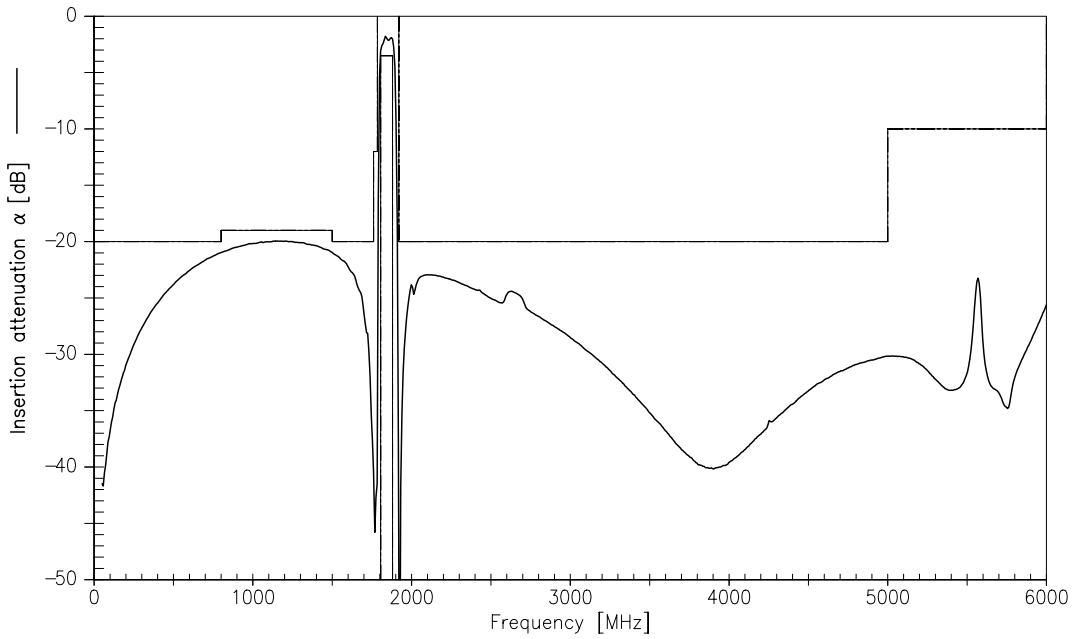
Operating temperature range: T = -30 to +80˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

			min.	typ.	max.	
Center frequency		f_c	—	1842,5	—	MHz
Maximum insertion attenuation		α_{max}				
	1805,0 ...1880,0 MHz		—	3,8	4,0	dB
Amplitude ripple (p-p)		$\Delta\alpha$				
	1805,0 ...1880,0 MHz		—	2,1	2,3	dB
Input VSWR						
	1805,0 ...1880,0 MHz		—	2,1	2,4	
Output VSWR						
	1805,0 ...1880,0 MHz		—	2,1	2,4	
Attenuation		α				
	10,0 ... 800,0 MHz		20,0	21,0	—	dB
	800,0 ...1500,0 MHz		19,0	20,0	—	dB
	1500,0 ...1705,0 MHz		20,0	21,0	—	dB
	1705,0 ...1760,0 MHz		20,0	25,0	—	dB
	1760,0 ...1785,0 MHz		8,0	16,0	—	dB
	1920,0 ...1980,0 MHz		20,0	25,0	—	dB
	1980,0 ...3120,0 MHz		20,0	22,0	—	dB
	3120,0 ...5000,0 MHz		20,0	25,0	—	dB
	5000,0 ...6000,0 MHz		10,0	20,0	—	dB

Transfer function (spec for 25°C)



Transfer function (wideband)



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