EPCOS

SAW Components

Data Sheet B4152

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SAW Components **B4152**

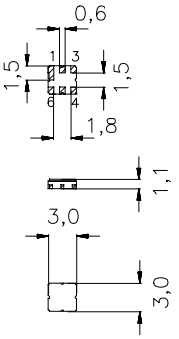
Low-Loss Filter for Mobile Communication **1842,5 MHz**

Data Sheet SMD

Ceramic package **DCC6D**

Features

- Low-loss RF filter for mobile telephone PCN systems, receive path
- Low amplitude ripple
- Usable passband 75 MHz
- Unbalanced to balanced operation
- Package for **S**urface **M**ounted **T**echnology (**SMT**)
- Ceramic SMD package



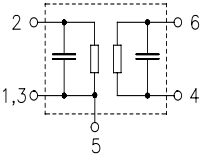
Terminals

- Ni, gold-plated

Dimensions in mm, approx. weight 0,037 g

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B4152	B39182-B4152-U510	C61157-A7-A68	F61074-V8089-Z000

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

Maximum ratings

Operable temperature range	T	– 10 / + 75	˚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 2:8

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Characteristics

Operating Temperature Range: T = +25 +- 2˚C
Terminating source impedance: Z_S = 50 Ω (unbalanced)
Terminating load impedance: Z_L = 50 Ω (balanced)

			min.	typ.	max.	
Center frequency		f_C	—	1842,5	—	MHz
Maximum insertion attenuation		α_{max}				
	1805,0 ... 1880,0 MHz		—	3,0	3,8	dB
Amplitude ripple (p-p)		$\Delta\alpha$				
	1805,0 ... 1880,0 MHz		—	1,3	2,0	dB
Input VSWR						
	1805,0 ... 1880,0 MHz		—	2,8	3,0	dB
Output VSWR						
	1805,0 ... 1880,0 MHz		—	2,0	2,7	dB
Attenuation		α				
	0 ... 1200,0 MHz		37	41	—	dB
	1200,0 ... 1650,0 MHz		25	35	—	dB
	1650,0 ... 1705,0 MHz		23	32	—	dB
	1705,0 ... 1785,0 MHz		13	15	—	dB
	1920,0 ... 1980,0 MHz		10	13	—	dB
	1980,0 ... 2000,0 MHz		22	27	—	dB
	2050,0 ... 6000,0 MHz		23	30	—	dB

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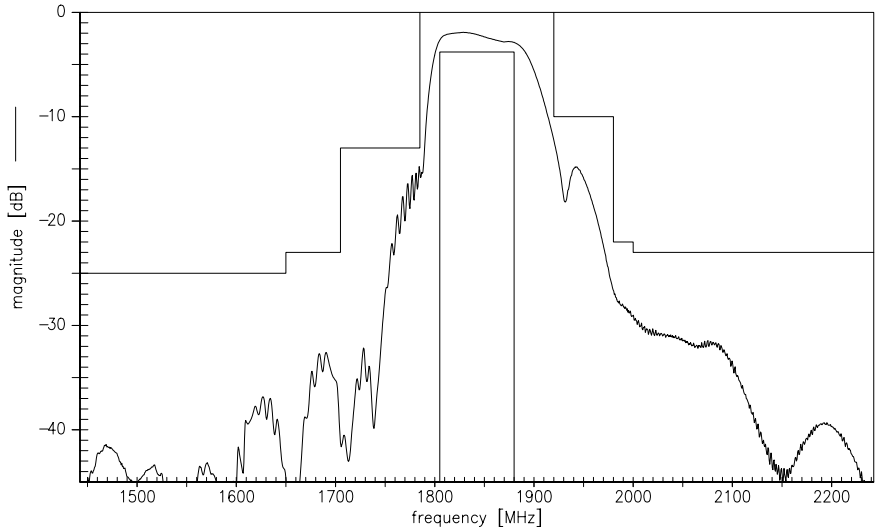
Characteristics

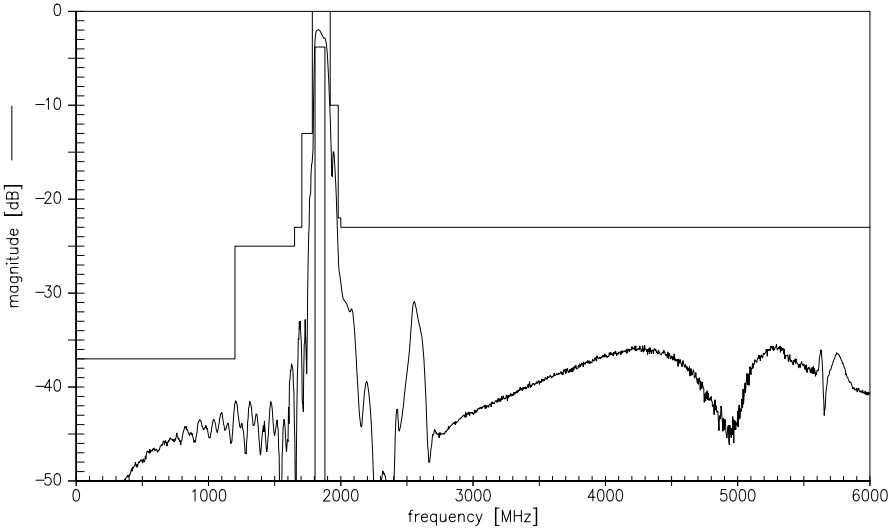
Operating Temperature Range: T = -10 to +75˚C
Terminating source impedance: Z_S = 50 Ω (unbalanced)
Terminating load impedance: Z_L = 50 Ω (balanced)

				min.	typ.	max.	
Center frequency			f_C	—	1842,5	—	MHz
Maximum insertion attenuation			α_{max}				
	1805,0	... 1880,0	MHz	—	3,2	4,3	dB
Amplitude ripple (p-p)			$\Delta\alpha$				
	1805,0	... 1880,0	MHz	—	1,5	2,5	dB
Input VSWR							
	1805,0	... 1880,0	MHz	—	2,8	3,3	dB
Output VSWR							
	1805,0	... 1880,0	MHz	—	2,1	3,0	dB
Attenuation			α				
	0	... 1200,0	MHz	37	41	—	dB
	1200,0	... 1650,0	MHz	25	35	—	dB
	1650,0	... 1705,0	MHz	23	32	—	dB
	1705,0	... 1785,0	MHz	10	15	—	dB
	1920,0	... 1980,0	MHz	9	13	—	dB
	1980,0	... 2000,0	MHz	22	26	—	dB
	2050,0	... 6000,0	MHz	23	30	—	dB

Transfer function



Transfer function (wide band)



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