EPCOS

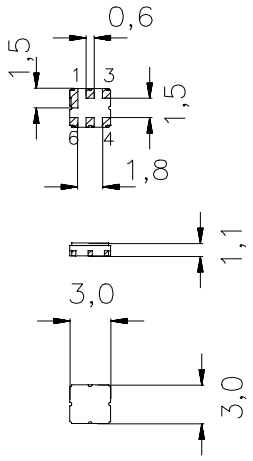
SAW Components

Data Sheet B4131

Ceramic package **DCC6C**

Features

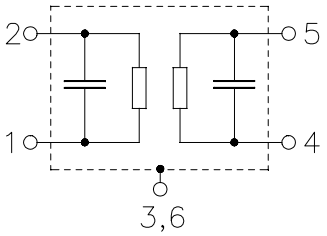
- Low-loss RF filter for EGSM mobile telephone system, receive path
- Low amplitude ripple
- Usable passband 35 MHz
- Ceramic package for **S**urface **M**ounted **T**echnology (**SMT**)
- Terminals
- Ni, gold-plated



Dimensions in mm, approx. weight 0,037 g

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B4131	B39941-B4131-U410	C61157-A7-A67	F61074-V8088-Z000

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

Maximum ratings

Operable temperature range	T	– 30 / +85	˚C	
Storage temperature range	T_{stg}	– 40 / + 85	˚C	
DC voltage	V_{DC}	3	V	
Input power max.				
880...915 MHz	P_{IN}	5	dBm	source and load impedance 50 Ω
1710...1785 MHz		5	dBm	peak power of GSM signal, duty cycle 1 : 8
elsewhere		0	dBm	continuous wave

Characteristics

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

		min.	typ.	max.	
Center frequency	f_C	—	942,5	—	MHz
Maximum insertion attenuation	α_{max}				
925,0 ... 960,0 MHz		—	3,2	4,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
925,0 ... 960,0 MHz		—	1,4	2,5	dB
Attenuation	α				
0,0 ... 800,0 MHz		50	60	—	dB
800,0 ... 880,0 MHz		40	52	—	dB
880,0 ... 905,0 MHz		35	40	—	dB
905,0 ... 915,0 MHz		20	28	—	dB
980,0 ...1005,0 MHz		23	25	—	dB
1005,0 ...1025,0 MHz		30	42	—	dB
1025,0 ...1760,0 MHz		40	50	—	dB
1760,0 ... 2500,0 MHz		30	40	—	dB
2500,0 ... 3120,0 MHz		20	27	—	dB
3120,0 ... 4000,0 MHz		18	25	—	dB
4000,0 ... 6000,0 MHz		—	10	—	dB
Input reflection coefficient @1842,5 MHz					
Phase		-150	-140	-130	°

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	—	942,5	—	MHz
Maximum insertion attenuation	α_{max}				
925,0 ... 960,0 MHz		—	3,6	4,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
925,0 ... 960,0 MHz		—	1,8	2,5	dB
Attenuation	α				
0,0 ... 800,0 MHz		50	60	—	dB
800,0 ... 880,0 MHz		40	52	—	dB
880,0 ... 905,0 MHz		35	40	—	dB
905,0 ... 915,0 MHz		20	28	—	dB
980,0 ...1005,0 MHz		20	23	—	dB 1)
980,0 ...1005,0 MHz		23	25	—	dB 2)
980,0 ... 982,0 MHz		20	23	—	dB
982,0 ...1005,0 MHz		23	27	—	dB
1005,0 ...1025,0 MHz		30	42	—	dB
1025,0 ...1760,0 MHz		40	50	—	dB
1760,0 ... 2500,0 MHz		30	40	—	dB
2500,0 ... 3120,0 MHz		20	27	—	dB
3120,0 ... 4000,0 MHz		18	25	—	dB
4000,0 ... 6000,0 MHz		—	10	—	dB
Input reflection coefficient @1842,5 MHz					
Phase		-150	-140	-130	°

1) specification valid for T < 25°C

2) specification valid for T>= 25°C

Characteristics

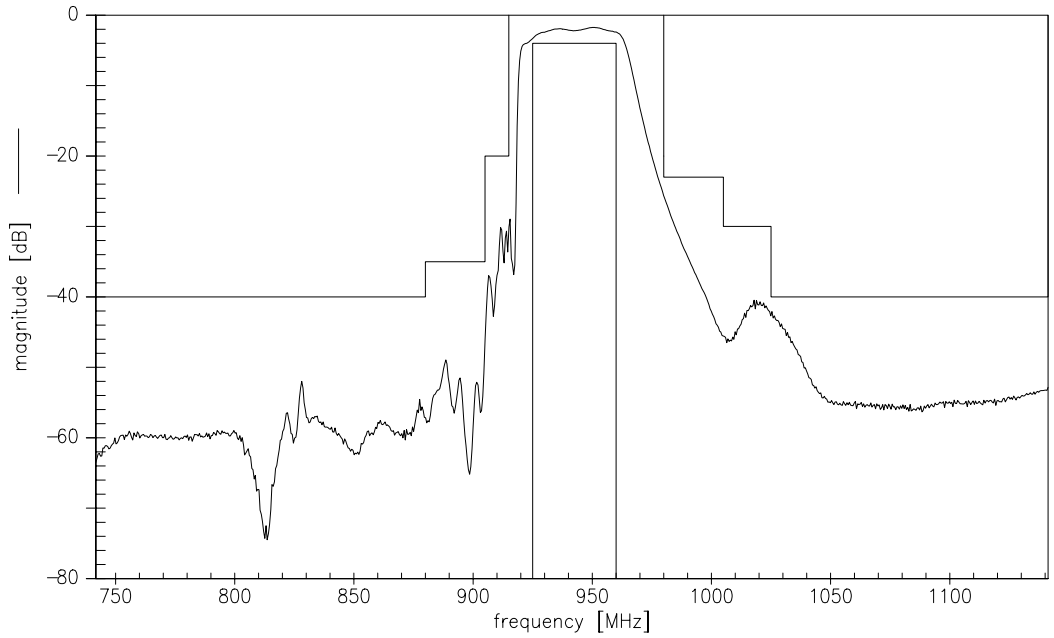
Operating temperature range: T = -30 to + 80 ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Center frequency	f_C	—	942,5	—	MHz
Maximum insertion attenuation	α_{max}				
925,0 ... 960,0 MHz		—	3,8	4,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
925,0 ... 960,0 MHz		—	2,1	2,8	dB
Attenuation	α				
0,0 ... 800,0 MHz		50	60	—	dB
800,0 ... 880,0 MHz		40	52	—	dB
880,0 ... 905,0 MHz		35	40	—	dB
905,0 ... 915,0 MHz		15	28	—	dB
980,0 ...1005,0 MHz		20	23	—	dB 1)
980,0 ...1005,0 MHz		23	25	—	dB 2)
980,0 ... 982,0 MHz		20	23	—	dB
982,0 ...1005,0 MHz		23	27	—	dB
1005,0 ...1025,0 MHz		30	42	—	dB
1025,0 ...1760,0 MHz		40	50	—	dB
1760,0 ... 2500,0 MHz		30	40	—	dB
2500,0 ... 3120,0 MHz		20	27	—	dB
3120,0 ... 4000,0 MHz		18	25	—	dB
4000,0 ... 6000,0 MHz		—	10	—	dB
Input reflection coefficient @1842,5 MHz					
Phase		-150	-140	-130	°

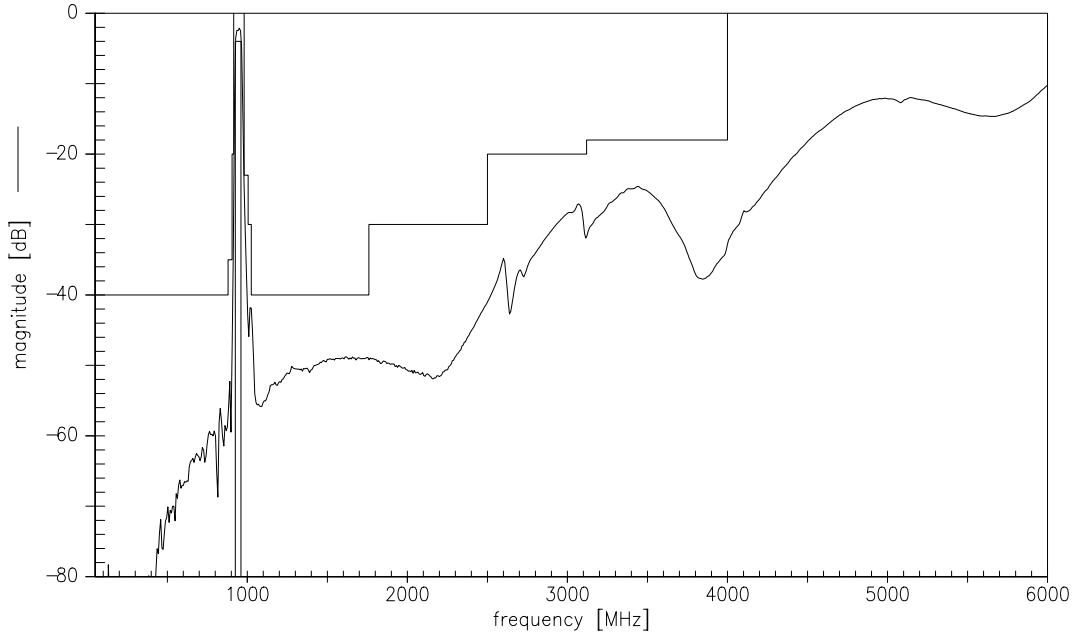
1) specification valid for T < 25˚C

2) specification valid for T>= 25˚C

Transfer function (drawn specification for +25 C)



Transfer function (wideband)



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.