



# SAW Components

Data Sheet B4146





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## Low-Loss Filter for Mobile Communication

881,50 MHz

## Data Sheet

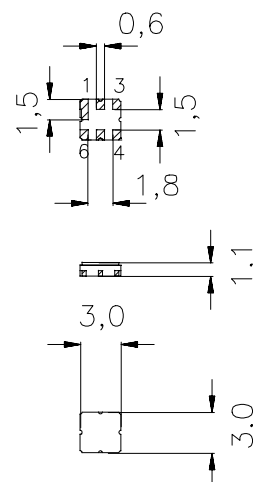
Ceramic package **DCC6D**

## Features

- Low-loss RF filter for mobile telephone AMPS system, receive path
- Low amplitude ripple
- Usable passband 25 MHz
- Unbalanced to balanced operation
- Impedance transformation from 50  $\Omega$  to 200  $\Omega$
- Ceramic package for **Surface Mounted Technology (SMT)**

## Terminals

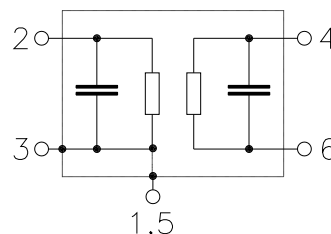
- Ni, gold-plated



Dimensions in mm, approx. weight 0,037 g

## Pin configuration

2	Input
4	Balanced output
6	Balanced output
1, 3, 5	Ground, to be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B4146	B39881-B4146-U510	C61157-A7-A68	F61074-V8089-Z000

### Electrostatic Sensitive Device (ESD)

### Maximum ratings

Operable temperature range	$T$	- 40 / + 85	°C	Human Body Model source impedance 50 $\Omega$
Storage temperature range	$T_{\text{stg}}$	- 40 / + 85	°C	
DC voltage	$V_{\text{DC}}$	5	V	
ESD	$V_{\text{ESD}}$	50	V	
Input power max.	$P_{\text{IN}}$	5	dBm	



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### Characteristics

Operating temperature range:	$T = -30 \text{ to } +85 \text{ }^{\circ}\text{C}$
Terminating source impedance:	$Z_S = 50 \text{ } \Omega$
Terminating load impedance:	$Z_L = 200 \text{ } \Omega \parallel 68\text{nH}(\text{balanced})$

		min.	typ.	max.	
<b>Center frequency</b>	$f_C$	—	881,5	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$				
869,0 ... 894,0 MHz		—	2,5	3,0	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$				
869,0 ... 894,0 MHz		—	0,7	1,2	dB
<b>VSWR</b>					
869,0 ... 894,0 MHz		—	1,8	1,9	
<b>Attenuation</b>	$\alpha$				
0,0 ... 824,0 MHz		50,0	60,0	—	dB
824,0 ... 849,0 MHz		35,0	40,0	—	dB
924,0 ... 970,0 MHz		30,0	40,0	—	dB
970,0 ... 1300,0 MHz		50,0	65,0	—	dB
1300,0 ... 2000,0 MHz		40,0	60,0	—	dB
2000,0 ... 3000,0 MHz		30,0	50,0	—	dB



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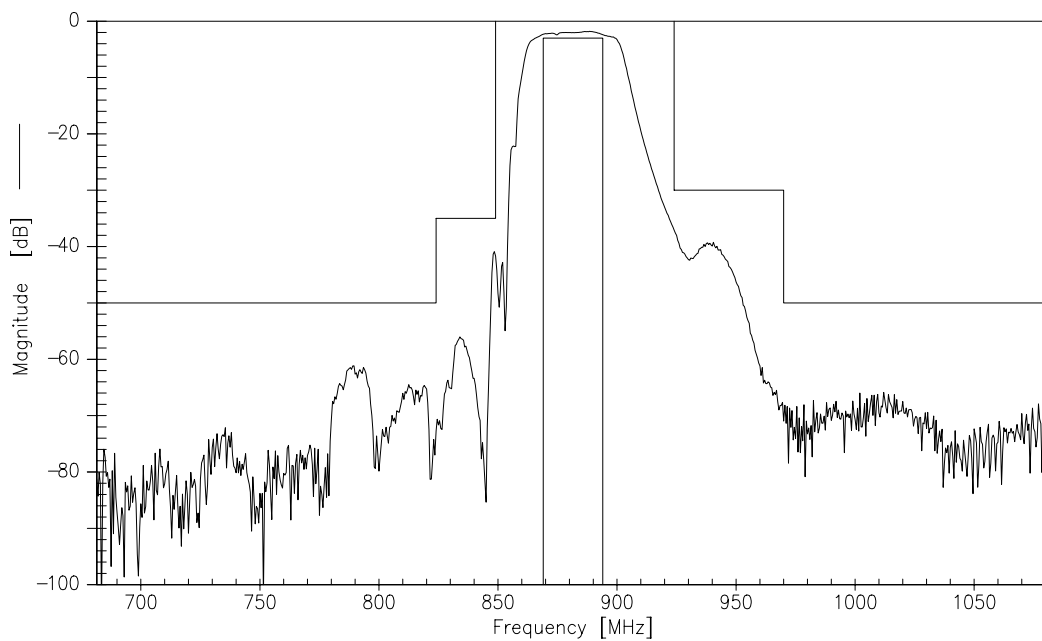
**Low-Loss Filter for Mobile Communication**

**881,50 MHz**

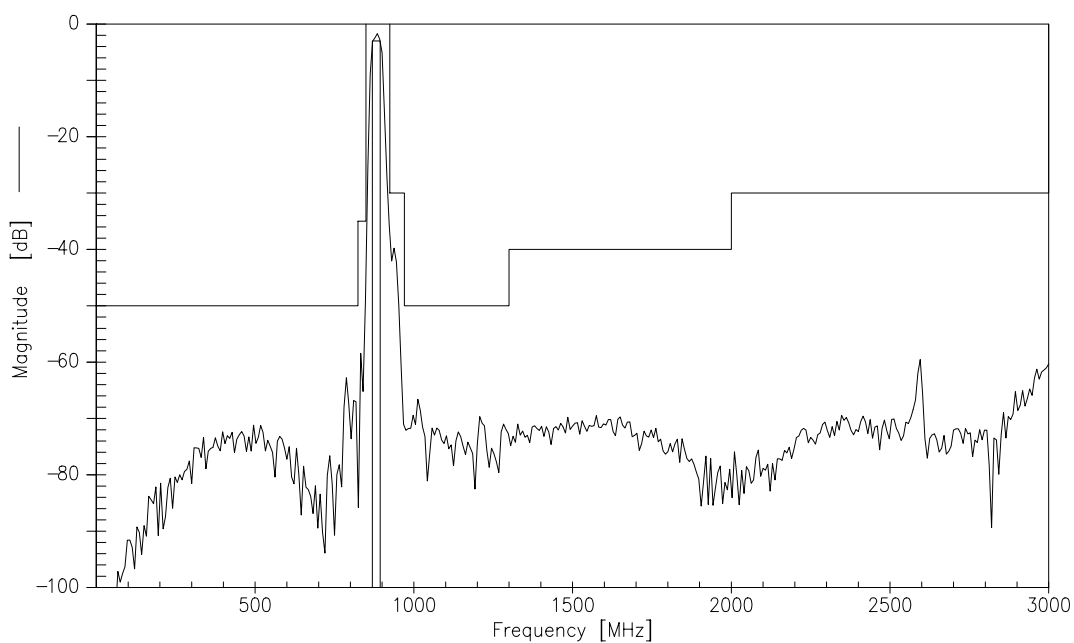
**Data Sheet**



**Transfer function**



**Transfer function**





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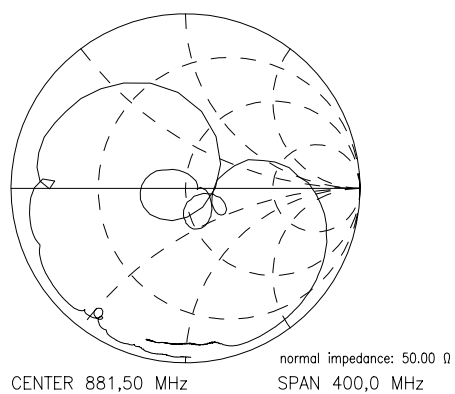
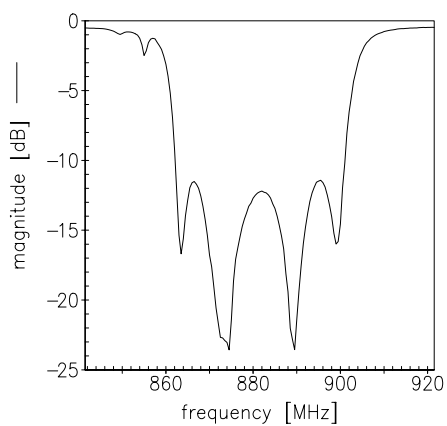
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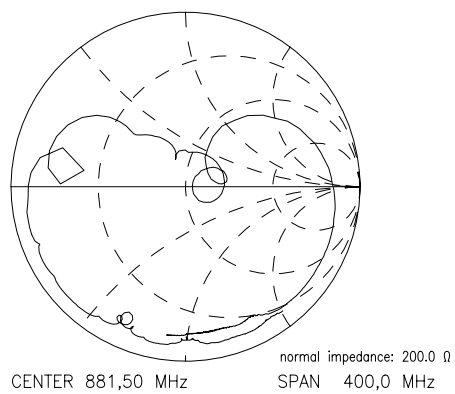
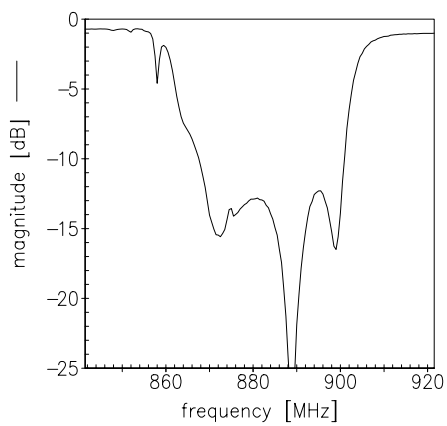
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$S_{11}$



$S_{22}$





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