



SAW Components

Data Sheet B4146





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Low-Loss Filter for Mobile Communication

881,50 MHz

Data Sheet



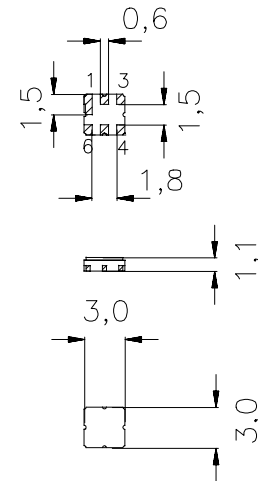
Ceramic package **DCC6D**

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 Ω to 200 Ω
- Ceramic package for **Surface Mounted Technology (SMT)**

Terminals

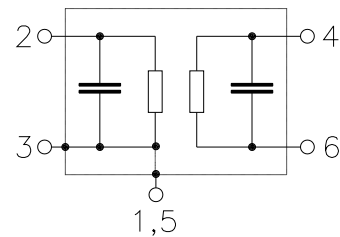
- Ni, gold-plated



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 Ω
Storage temperature range	T_{stg}	- 40 / + 85	°C	
DC voltage	V_{DC}	5	V	
ESD	V_{ESD}	50	V	
Input power max.	P_{IN}	5	dBm	



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Characteristics

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

				min.	typ.	max.		
Center frequency		f_C		—	881,5	—	MHz	
Maximum insertion attenuation	869,0 ... 894,0	MHz	α_{max}	—	2,5	3,0	dB	
Amplitude ripple (p-p)	869,0 ... 894,0	MHz	$\Delta\alpha$	—	0,7	1,2	dB	
VSWR	869,0 ... 894,0	MHz		—	1,8	1,9		
Attenuation			α					
	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	



Characteristics

Operating temperature range: $T = -40$ to $+85$ °C
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 200 \Omega \parallel 68\text{nH}(\text{balanced})$

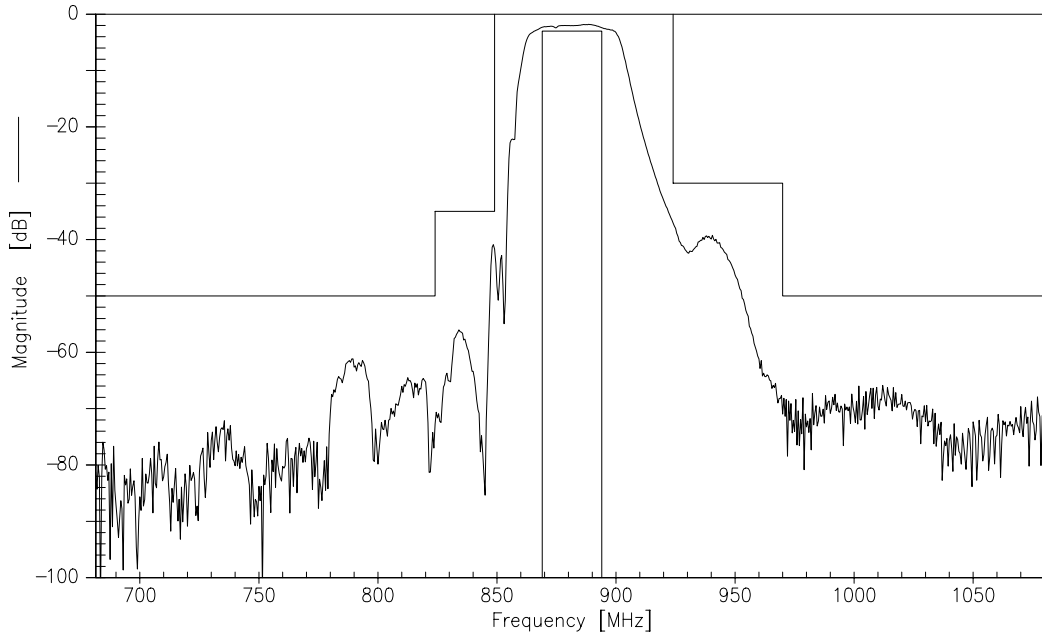
				min.	typ.	max.		
Center frequency			f_C	—	881,5	—	MHz	
Maximum insertion attenuation			α_{max}					
	869,0 ... 894,0	MHz		—	2,8	3,1	dB	
Amplitude ripple (p-p)			$\Delta\alpha$					
	869,0 ... 894,0	MHz		—	1,0	1,3	dB	
VSWR								
	869,0 ... 894,0	MHz		—	1,8	1,9		
Attenuation			α					
	0,0 ... 824,0	MHz		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	



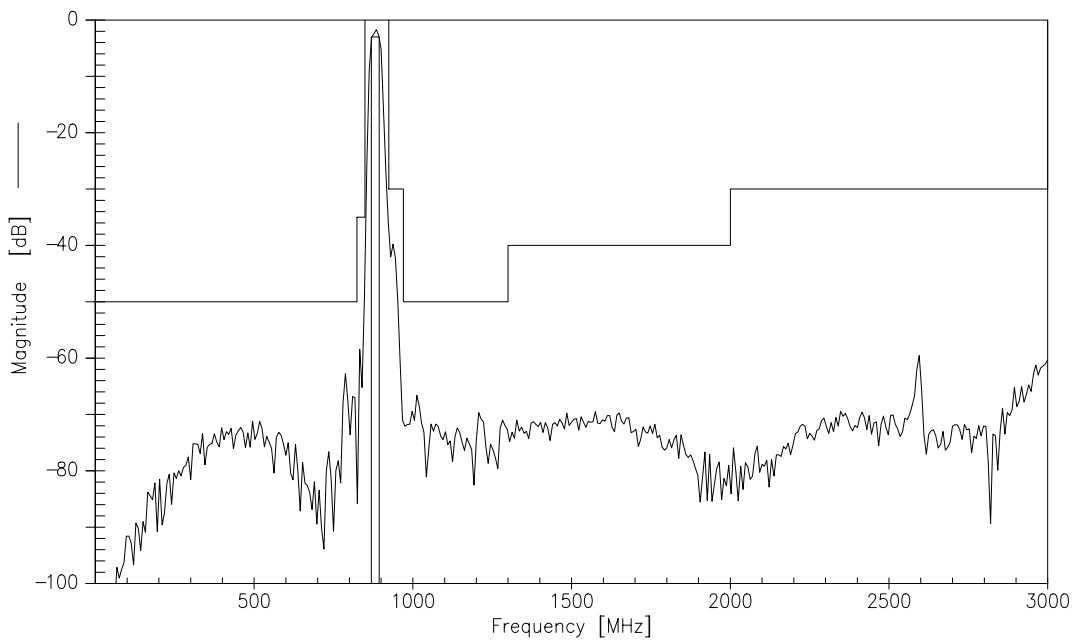
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Transfer function



Transfer function





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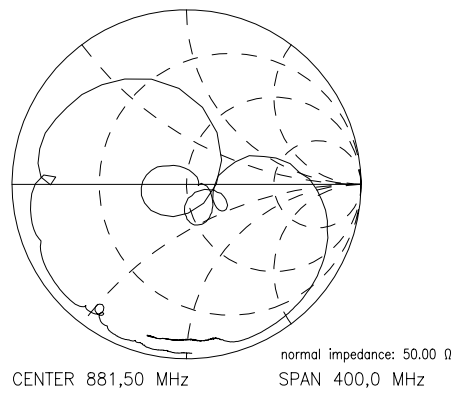
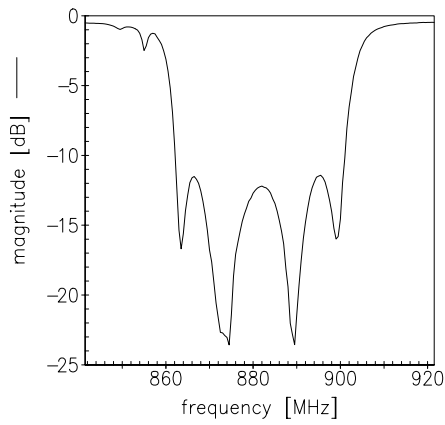
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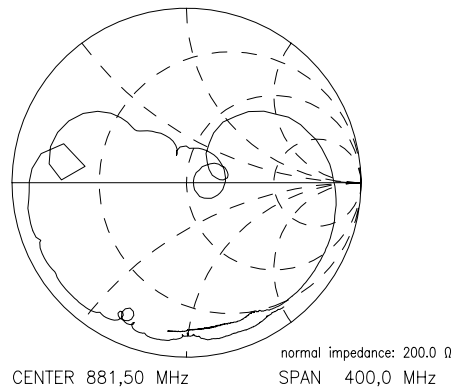
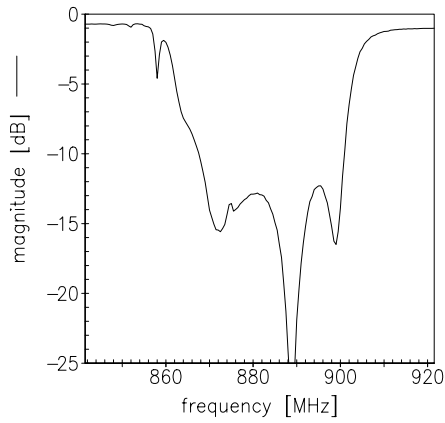
Data Sheet



S_{11}



S_{22}





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