



# SAW Components

Data Sheet B4147





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Low-Loss Filter for Mobile Communication

836,50 MHz

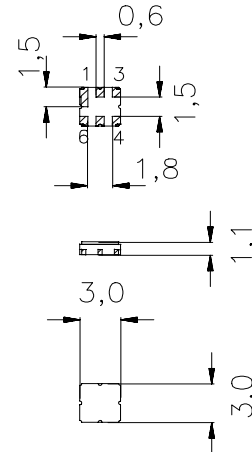
Data Sheet



Ceramic package **DCC6C**

**Features**

- Low-loss RF filter for mobile telephone AMPS systems, transmit path
- Usable passband 25 MHz
- No matching network required for operation at 50 Ω
- Package for **Surface Mounted Technology (SMT)**



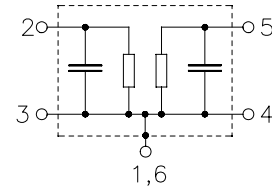
**Terminals**

- Ni, gold-plated

Dimensions in mm, approx. weight 0,037g

**Pin configuration**

- 2 Input
- 5 Output
- 1, 3, 4, 6 Ground, to be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B4147	B39841-B4147-U410	C61157-A7-A67	F61074-V8088-Z000

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

Operable temperature range	$T$	- 30 / + 85	°C	
Storage temperature range	$T_{stg}$	- 40 / + 85	°C	
DC voltage	$V_{DC}$	5	V	
Input power max.	$P_{IN}$	16	dBm	CDMA signal



**Characteristics**

Operating temperature range:  $T = +25^{\circ}\text{C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 50\ \Omega$

			min.	typ.	max.	
<b>Center frequency</b>	$f_c$		—	836,5	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$					
		824,0 ... 849,0 MHz	—	2,7	3,0	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$					
		824,0 ... 849,0 MHz	—	1,7	2,0	dB
<b>VSWR</b>						
		824,0 ... 849,0 MHz	—	1,78	1,92	
<b>Attenuation</b>	$\alpha$					
		0,0 ... 779,0 MHz	31,0	34,0	—	dB
		779,0 ... 805,0 MHz	25,0	31,0	—	dB
		869,0 ... 894,0 MHz	40,0	44,0	—	dB
		894,0 ... 979,0 MHz	36,0	40,0	—	dB
		979,0 ... 1030,0 MHz	38,0	40,0	—	dB
		1030,0 ... 1300,0 MHz	36,0	39,0	—	dB
		1300,0 ... 1580,0 MHz	28,0	32,0	—	dB
		1580,0 ... 1698,0 MHz	24,0	30,0	—	dB
		1698,0 ... 2547,0 MHz	14,0	22,0	—	dB
<b>Rx band suppression</b>	$\alpha$					
		869,0 ... 894,0 MHz	40,0	44,0	—	dB



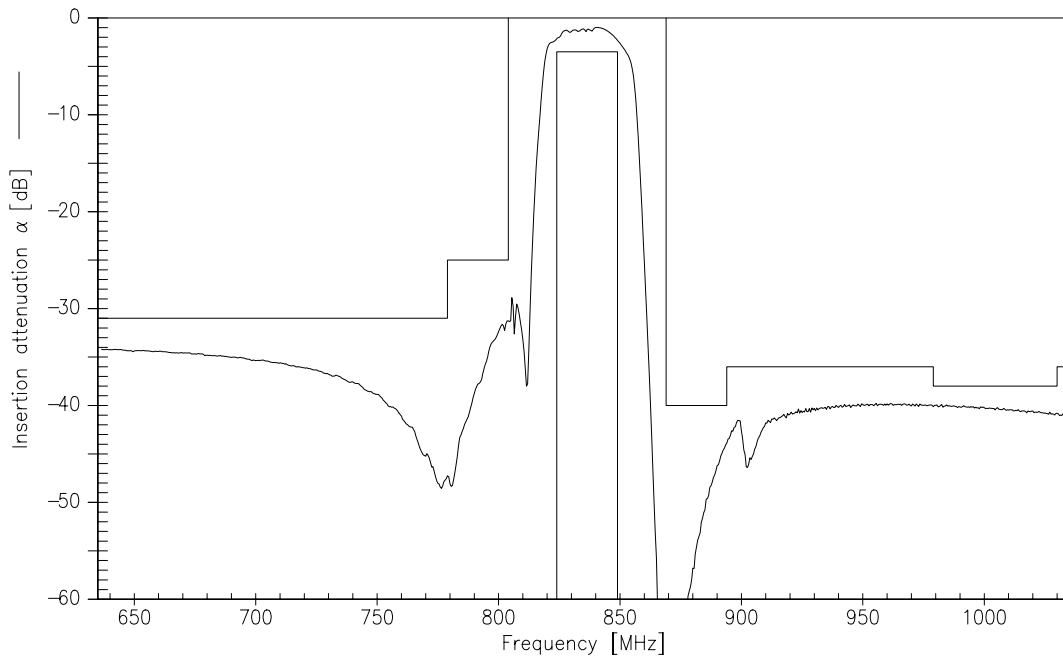
**Characteristics**

Operating temperature range:  $T = -30$  to  $+85^{\circ}\text{C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 50\ \Omega$

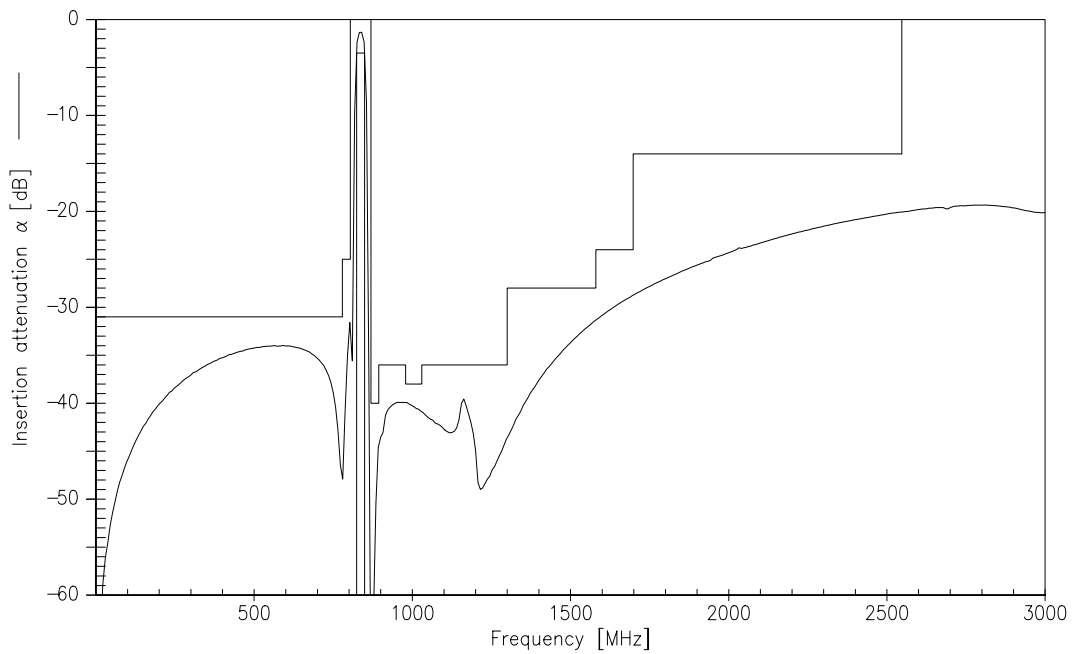
			min.	typ.	max.	
<b>Center frequency</b>	$f_c$		—	836,5	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$					
		824,0 ... 849,0 MHz	—	3,0	3,5	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$					
		824,0 ... 849,0 MHz	—	2,0	2,5	dB
<b>VSWR</b>						
		824,0 ... 849,0 MHz	—	1,78	1,92	
<b>Attenuation</b>	$\alpha$					
		0,0 ... 779,0 MHz	31,0	34,0	—	dB
		779,0 ... 805,0 MHz	25,0	31,0	—	dB
		869,0 ... 894,0 MHz	40,0	43,0	—	dB
		894,0 ... 979,0 MHz	36,0	40,0	—	dB
		979,0 ... 1030,0 MHz	38,0	40,0	—	dB
		1030,0 ... 1300,0 MHz	36,0	39,0	—	dB
		1300,0 ... 1580,0 MHz	28,0	32,0	—	dB
		1580,0 ... 1698,0 MHz	24,0	30,0	—	dB
		1698,0 ... 2547,0 MHz	14,0	22,0	—	dB
<b>Rx band suppression</b>	$\alpha$					
		869,0 ... 894,0 MHz	40,0	43,0	—	dB



Transfer function (narrowband measurement)

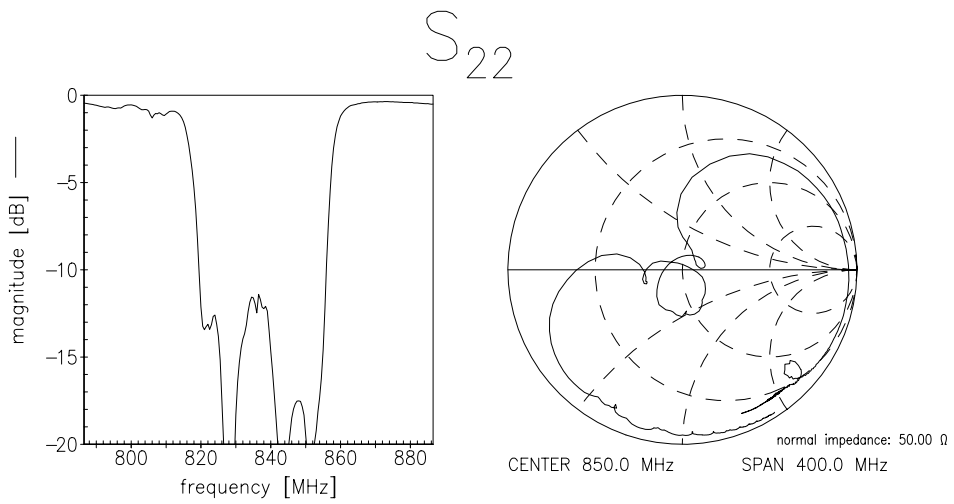
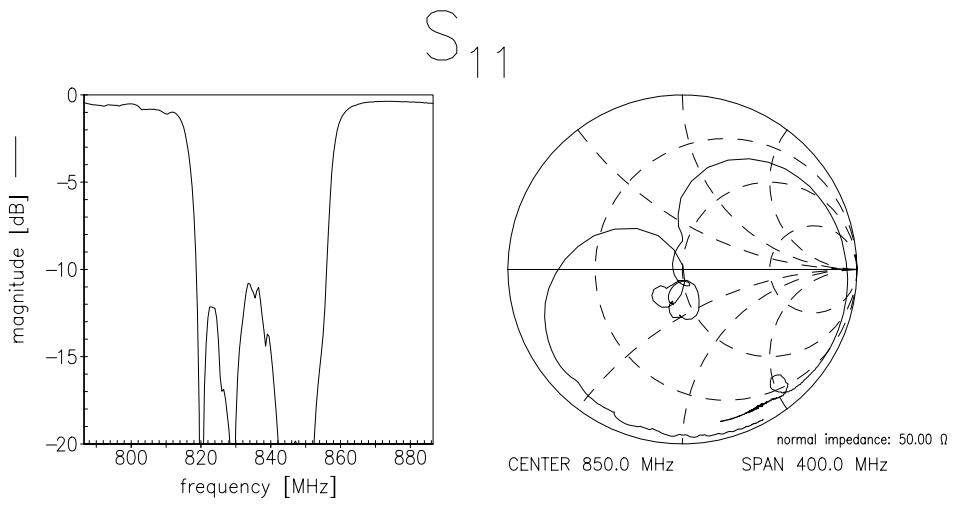


Transfer function (wideband measurement)





Reflection functions (measurement)





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