



# SAW Components

Date Sheet B4130





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B4130

Low-Loss Filter for Mobile Communication

897,5 MHz

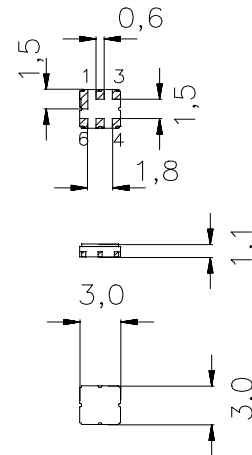
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Ceramic Package DCC6C

**Features**

- Low-loss RF filter for EGSM mobile systems
- Low amplitude ripple
- Usable passband 35 MHz
- No matching network required for operation at 50 Ω
- Ceramic Package for **Surface Mounted Technology (SMT)**
- RoHS compatible



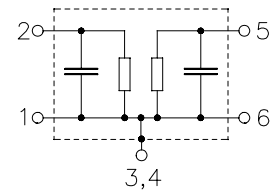
**Terminals**

- Ni, gold-plated

**Pin configuration**

- 2 Input
- 1 Input - ground
- 5 Output
- 6 Output - ground
- 3,4 Case ground

Dimensions in mm, approx. weight 37mg



Type	Ordering code	Marking and Package according to	Packing according to
B4130	B39901-B4130-U410	C61157-A7-A67	F61074-V8168-Z000

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

Operable temperature range	$T$	-40 / +85	°C	Machine Model, 10 pulses
Storage temperature range	$T_{stg}$	-40 / +85	°C	
DC voltage	$V_{DC}$	3	V	
ESD voltage	$V_{ESD}^*$	100*	V	
Input power max.				
925,0 ... 960,0 MHz	$P_{IN}$	12	dBm	
	$P_{IN}$	15	dBm	continuous wave, 85 °C
880,0 ... 915,0 MHz	$P_{IN}$	17	dBm	continuous wave, 55 °C
				effective power in the on-state, duty cycle 4:8, 85 °C

\* - acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses



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**Characteristics**

Operating temperature range:  $T = 25 \pm 2 \text{ }^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 50 \text{ } \Omega$   
 Terminating load impedance:  $Z_L = 50 \text{ } \Omega$

			min.	typ.	max.	
<b>Center frequency</b>	$f_c$		—	897,50	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$	880,0 ... 915,0 MHz	—	2,0	2,3	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$	880,0 ... 915,0 MHz	—	0,8	1,1	dB
<b>Input VSWR</b>		880,0 ... 915,0 MHz	—	1,7	2,0	
<b>Output VSWR</b>		880,0 ... 915,0 MHz	—	1,7	2,0	
<b>Attenuation</b>	$\alpha$	0,0 ... 860,0 MHz	17	20	—	dB
		925,0 ... 935,0 MHz	5,5	13	—	dB
		935,0 ... 960,0 MHz	20	26	—	dB
		960,0 ... 3660,0 MHz	20	26	—	dB



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**Characteristics**

Operating temperature range:  $T = -10$  to  $+80^{\circ}\text{C}$   
 Terminating source impedance:  $Z_S = 50\ \Omega$   
 Terminating load impedance:  $Z_L = 50\ \Omega$

				min.	typ.	max.	
<b>Center frequency</b>		$f_c$		—	897,50	—	MHz
<b>Maximum insertion attenuation</b>	880,0 ... 915,0		$\alpha_{\max}$	—	2,0	2,5	dB
	MHz						
<b>Amplitude ripple (p-p)</b>	880,0 ... 915,0		$\Delta\alpha$	—	0,8	1,3	dB
	MHz						
<b>Input VSWR</b>	880,0 ... 915,0			—	1,7	2,0	
	MHz						
<b>Output VSWR</b>	880,0 ... 915,0			—	1,7	2,0	
	MHz						
<b>Attenuation</b>			$\alpha$				
	0,0 ... 860,0	MHz		17	20	—	dB
	925,0 ... 935,0	MHz		4	8	—	dB
	935,0 ... 960,0	MHz		20	26	—	dB
	960,0 ... 3660,0	MHz		20	26	—	dB



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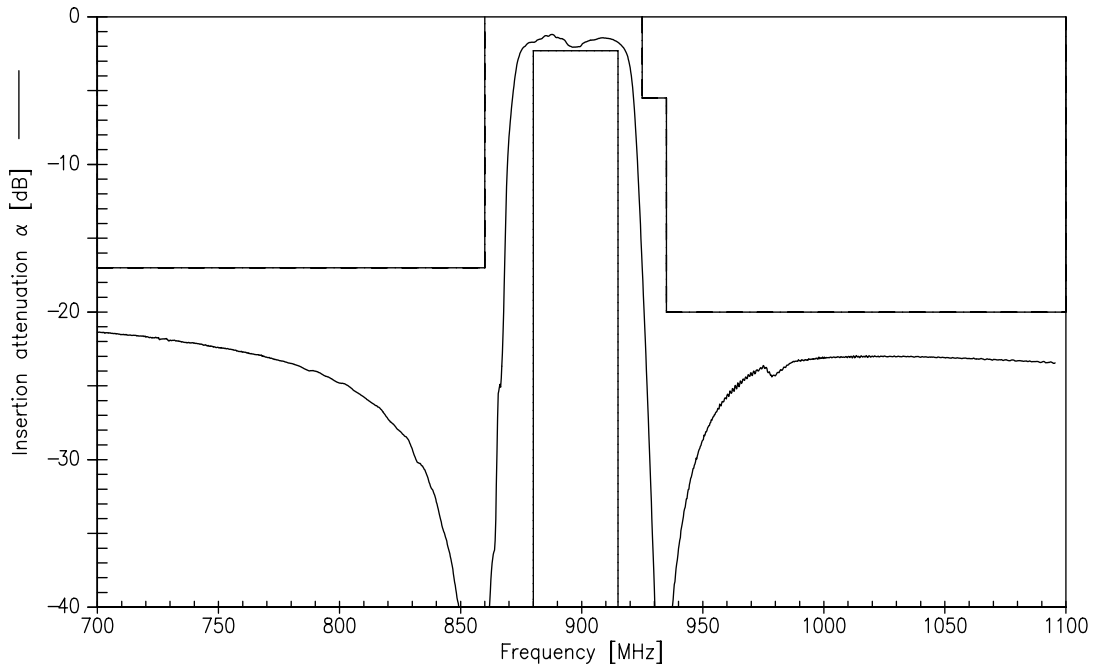
**Characteristics**

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

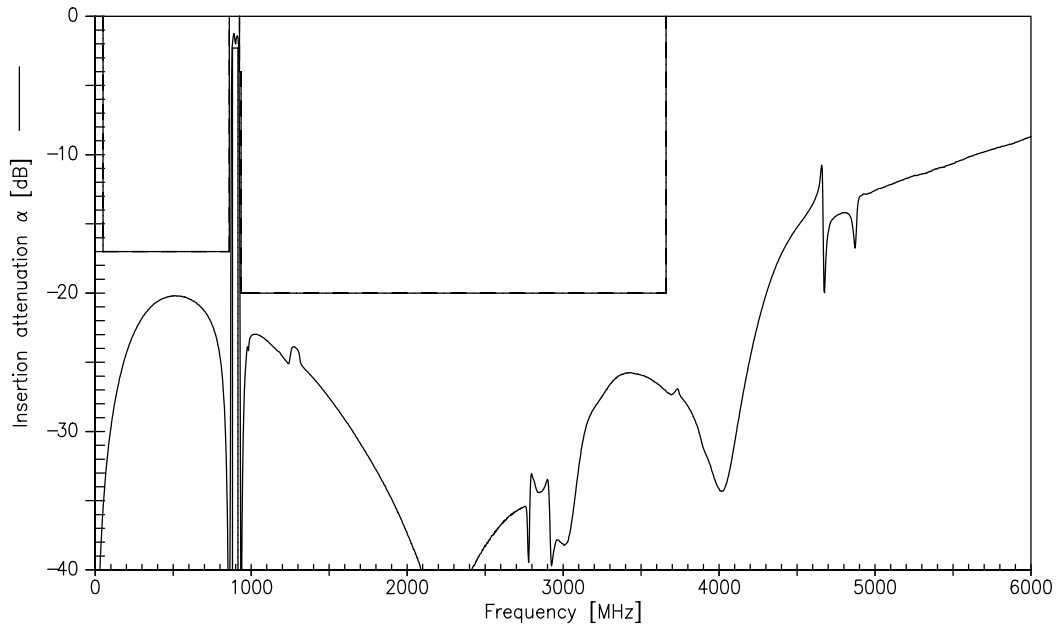
			min.	typ.	max.	
<b>Center frequency</b>	$f_c$		—	897,50	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$	880,0 ... 915,0 MHz	—	2,0	2,5	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$	880,0 ... 915,0 MHz	—	0,8	1,3	dB
<b>Input VSWR</b>		880,0 ... 915,0 MHz	—	1,7	2,0	
<b>Output VSWR</b>		880,0 ... 915,0 MHz	—	1,7	2,0	
<b>Attenuation</b>	$\alpha$	0,0 ... 860,0 MHz	17	20	—	dB
		925,0 ... 935,0 MHz	3,2	7	—	dB
		935,0 ... 960,0 MHz	20	26	—	dB
		960,0 ... 3660,0 MHz	20	26	—	dB



Transfer function



Transfer function (wideband)





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