



SAW Components

Date Sheet B4130





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B4130

Low-Loss Filter for Mobile Communication

897,5 MHz

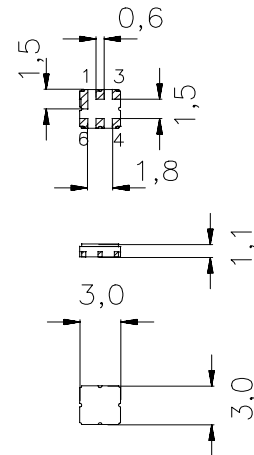
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Ceramic Package DCC6C

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



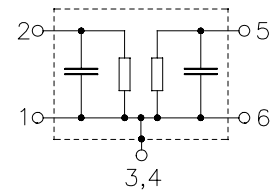
Terminals

- 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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Data Sheet



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.	
Center frequency	f_c		—	897,50	—	MHz
Maximum insertion attenuation	α_{\max}	880,0 ... 915,0 MHz	—	2,0	2,3	dB
Amplitude ripple (p-p)	$\Delta\alpha$	880,0 ... 915,0 MHz	—	0,8	1,1	dB
Input VSWR		880,0 ... 915,0 MHz	—	1,7	2,0	
Output VSWR		880,0 ... 915,0 MHz	—	1,7	2,0	
Attenuation	α	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.	
Center frequency		f_c		—	897,50	—	MHz
Maximum insertion attenuation	880,0 ... 915,0	MHz	α_{\max}	—	2,0	2,5	dB
Amplitude ripple (p-p)	880,0 ... 915,0	MHz	$\Delta\alpha$	—	0,8	1,3	dB
Input VSWR	880,0 ... 915,0	MHz		—	1,7	2,0	
Output VSWR	880,0 ... 915,0	MHz		—	1,7	2,0	
Attenuation			α				
	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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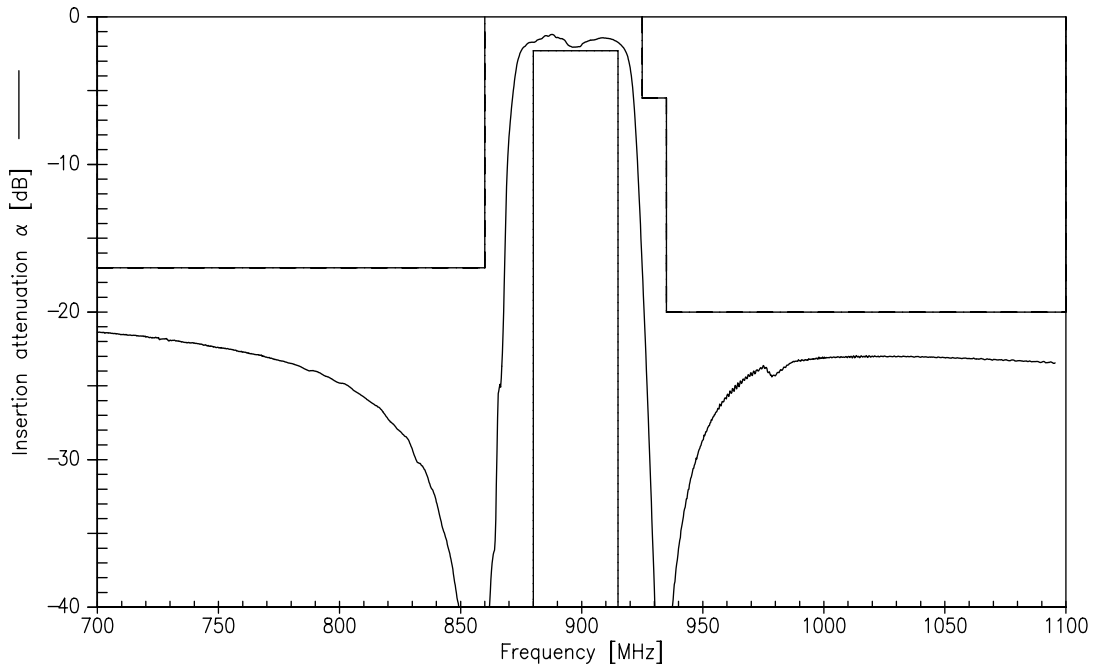
Characteristics

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

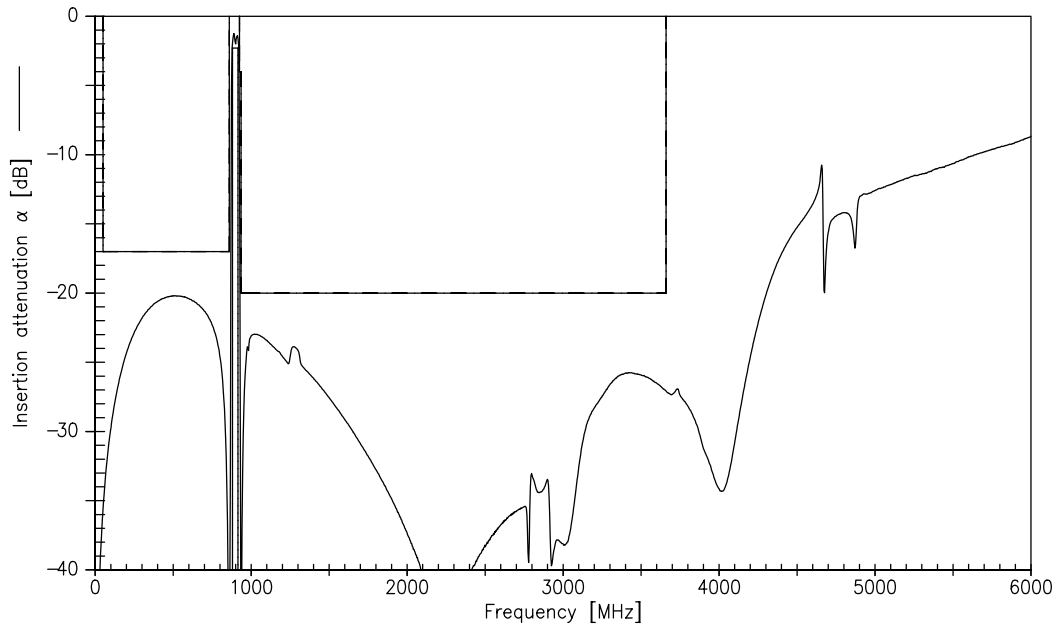
			min.	typ.	max.	
Center frequency	f_c		—	897,50	—	MHz
Maximum insertion attenuation	α_{\max}	880,0 ... 915,0 MHz	—	2,0	2,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$	880,0 ... 915,0 MHz	—	0,8	1,3	dB
Input VSWR		880,0 ... 915,0 MHz	—	1,7	2,0	
Output VSWR		880,0 ... 915,0 MHz	—	1,7	2,0	
Attenuation	α	0,0 ... 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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