



SAW Components

Data Sheet B4042





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Low-Loss Filter for Mobile Communication

860,50 MHz

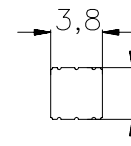
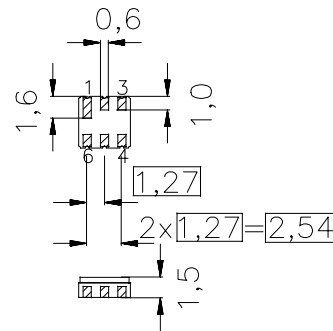
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Features

- Low-loss RF filter for iDEN mobile telephone, receive path
- Low insertion attenuation
- Low amplitude ripple
- No matching network required for operation at 50 Ω
- Ceramic Package for **Surface Mounted Technology (SMT)**

Ceramic package **DCC6**



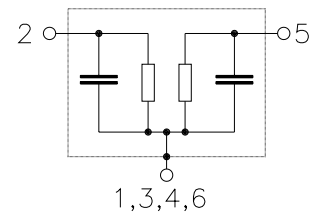
Dimensions in mm, approx. weight 0,07g

Terminals

- Ni, gold-plated

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B4042	B39861-B4042-Z610	C61157-A7-A41	F61074-V8030-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 30 / + 85	°C	source impedance 50 Ω continuous wave
Storage temperature range	T_{stg}	- 40 / + 85	°C	
DC voltage	V_{DC}	0	V	
Input power max.	P_{IN}	5	dBm	



Characteristics

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

		min.	typ.	max.	
Center frequency	f_c	—	860,50	—	MHz
Maximum insertion attenuation	α_{\max}				
	851,000... 870,000MHz	—	1,9	2,1	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
	851,000... 870,000MHz	—	0,25	0,5	dB
Attenuation	α_{\min}				
	0,000... 738,000MHz	30	53	—	dB
	738,000... 757,000MHz	45	52	—	dB
	757,000... 806,000MHz	30	48	—	dB
	806,000... 825,000MHz	35	45	—	dB
	905,825... 924,825MHz	37	40	—	dB
	960,650... 983,000MHz	45	58	—	dB
	1070,300...1089,300MHz	50	53	—	dB
	1089,300...2000,000MHz	30	34	—	dB
Input and output return loss					
	851,000... 870,000MHz	14	16	—	dB



Characteristics

Operating temperature range: $T = -30$ to $+70^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ.	max.	
Center frequency	f_c	—	860,50	—	MHz
Maximum insertion attenuation	α_{\max}				
	851,000... 870,000MHz	—	2,1	2,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
	851,000... 870,000MHz	—	0,45	0,7	dB
Attenuation	α_{\min}				
	0,000... 738,000MHz	30	53	—	dB
	738,000... 757,000MHz	45	52	—	dB
	757,000... 806,000MHz	30	48	—	dB
	806,000... 825,000MHz	35	44	—	dB
	905,825... 924,825MHz	37	40	—	dB
	960,650... 983,000MHz	45	58	—	dB
	1070,300...1089,300MHz	50	53	—	dB
	1089,300...2000,000MHz	30	34	—	dB
Input and output return loss					
	851,000... 870,000MHz	14	16	—	dB



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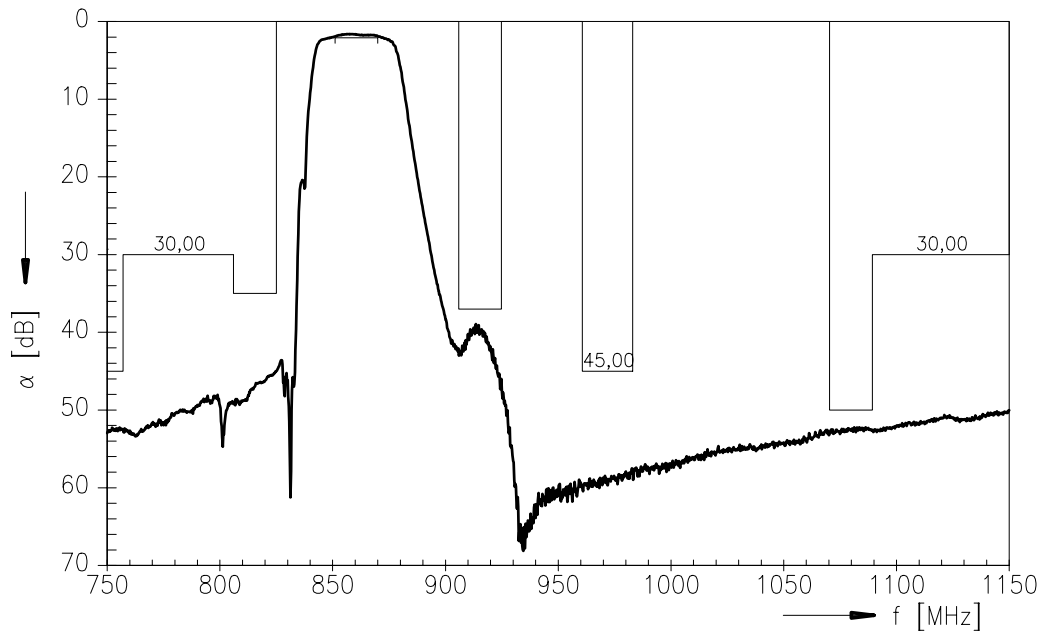
Characteristics

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

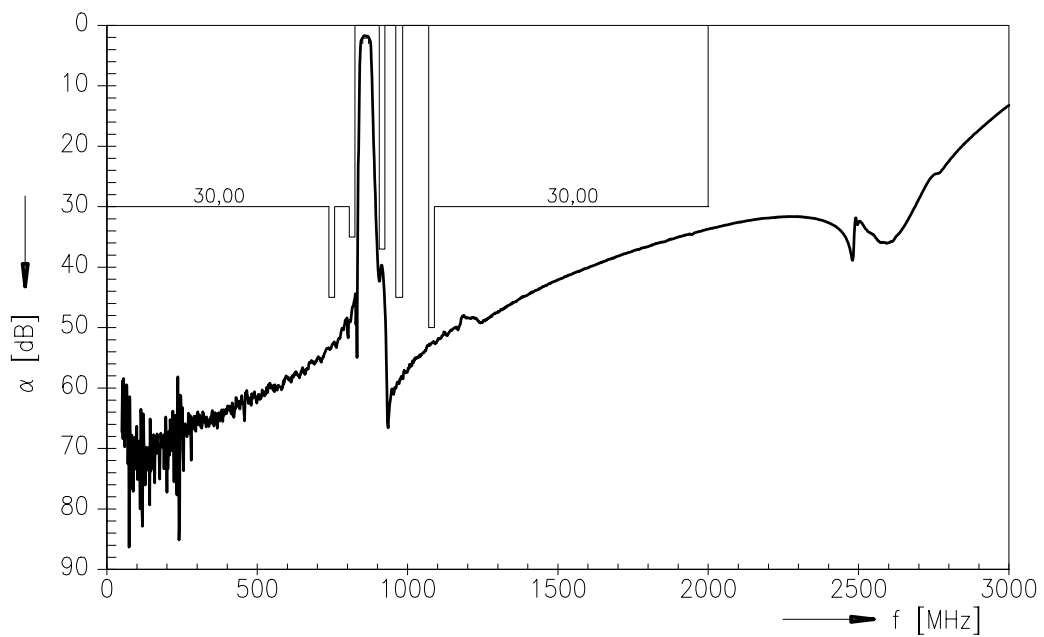
		min.	typ.	max.	
Center frequency	f_c	—	860,50	—	MHz
Maximum insertion attenuation	α_{\max}	—	2,2	2,7	dB
851,000... 870,000 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,55	1,0	dB
851,000... 870,000 MHz					
Attenuation	α_{\min}				
0,000... 738,000 MHz		30	53	—	dB
738,000... 757,000 MHz		45	52	—	dB
757,000... 806,000 MHz		30	48	—	dB
806,000... 825,000 MHz		35	44	—	dB
905,825... 924,825 MHz		37	40	—	dB
960,650... 983,000 MHz		45	58	—	dB
1070,300... 1089,300 MHz		50	53	—	dB
1089,300... 2000,000 MHz		30	34	—	dB
Input and output return loss					
851,000... 870,000 MHz		14	16	—	dB



Transfer function (25±2 °C)



Transfer function (wideband)





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