



SAW Components

Data Sheet B3868

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EPCOS



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Low-Loss Filter

929,5 MHz

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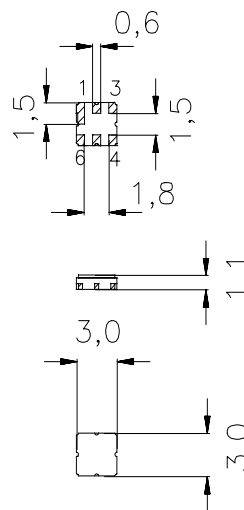
Ceramic package **DCC6C**

Features

- Low-loss RF filter for TETRA phone
- Usable bandwidth 25 MHz
- No matching required for operation at 50 Ω
- Ceramic package for **Surface Mounted Technology (SMT)**
- Hermetically sealed ceramic package
- RoHS compliant

Terminals

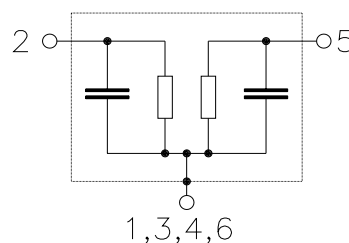
- Gold-plated Ni



Dimensions in mm, approx. weight 0,037 g

Pin configuration

2	Input
5	Output
1, 3, 4, 6	Case grounded



Type	Ordering code	Marking and Package according to	Packing according to
B3868	B39931-B3868-U410	C61157-A7-A67	F61074-V8168-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T_A	-35 / +85	$^{\circ}\text{C}$	Machine Model, 10 pulses source and load impedance 50 Ω
Storage temperature range	T_{stg}	-40 / +85	$^{\circ}\text{C}$	
DC voltage	V_{DC}	5	V	
ESD Voltage	V_{ESD}^*	100*	V	
Source power (cw)	P_S	6	dBm	

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



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Characteristics

Operating temperature range: $T_A = 25 \pm 10 \text{ }^{\circ}\text{C}$
Terminating source impedance: $Z_S = 50 \text{ }\Omega$
Terminating load impedance: $Z_L = 50 \text{ }\Omega$

		min.	typ.	max.	
Nominal frequency	f_N	—	929,5	—	MHz
Maximum insertion attenuation 917,0 MHz ... 942,0 MHz	$\alpha_{\max}$	—	1,9	2,5	dB
Amplitude ripple (p-p) 917,0 MHz ... 942,0 MHz	$\Delta\alpha$	—	0,6	1,0	dB
Group delay ripple (p-p) 917,0 MHz ... 942,0 MHz	$\Delta\tau$	—	20	30	ns
Return loss (Input and Output) 917,0 MHz ... 942,0 MHz		10,0	11,5	—	dB
Absolute attenuation	α_{abs}				
0,1 MHz ... 800,0 MHz		46	60	—	dB
800,0 MHz ... 870,0 MHz		40	60	—	dB
870,0 MHz ... 890,0 MHz		31	60	—	dB
890,0 MHz ... 900,0 MHz		17	22	—	dB
961,0 MHz ... 1005,0 MHz		20	26	—	dB
1005,0 MHz ... 1035,0 MHz		30	56	—	dB
1035,0 MHz ... 1070,0 MHz		45	50	—	dB
1070,0 MHz ... 1760,0 MHz		40	46	—	dB
1760,0 MHz ... 3120,0 MHz		30	39	—	dB
3120,0 MHz ... 4000,0 MHz		18	30	—	dB
4000,0 MHz ... 6000,0 MHz		—	5	—	dB
Temperature coefficient of frequency	TC_f	—	− 36	—	ppm/K



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Characteristics

Operating temperature range: $T_A = -30$ to $+85$ °C
Terminating source impedance: $Z_S = 50 \Omega$
Terminating load impedance: $Z_L = 50 \Omega$

		min.	typ.	max.	
Nominal frequency	f_N	—	929,5	—	MHz
Maximum insertion attenuation 917,0 MHz ... 942,0 MHz	$\alpha_{\max}$	—	2,2	3,3	dB
Amplitude ripple (p-p) 917,0 MHz ... 942,0 MHz	$\Delta\alpha$	—	0,7	1,2	dB
Group delay ripple (p-p) 917,0 MHz ... 942,0 MHz	$\Delta\tau$	—	24	40	ns
Return loss (Input and Output) 917,0 MHz ... 942,0 MHz		9,0	11,0	—	dB
Absolute attenuation	α_{abs}				
0,1 MHz ... 800,0 MHz		46	60	—	dB
800,0 MHz ... 870,0 MHz		40	60	—	dB
870,0 MHz ... 890,0 MHz		31	60	—	dB
890,0 MHz ... 900,0 MHz		15	22	—	dB
961,0 MHz ... 1005,0 MHz		19	23	—	dB
1005,0 MHz ... 1035,0 MHz		30	56	—	dB
1035,0 MHz ... 1070,0 MHz		45	50	—	dB
1070,0 MHz ... 1760,0 MHz		40	46	—	dB
1760,0 MHz ... 3120,0 MHz		30	39	—	dB
3120,0 MHz ... 4000,0 MHz		18	30	—	dB
4000,0 MHz ... 6000,0 MHz		—	5	—	dB
Temperature coefficient of frequency	TC_f	—	– 36	—	ppm/K



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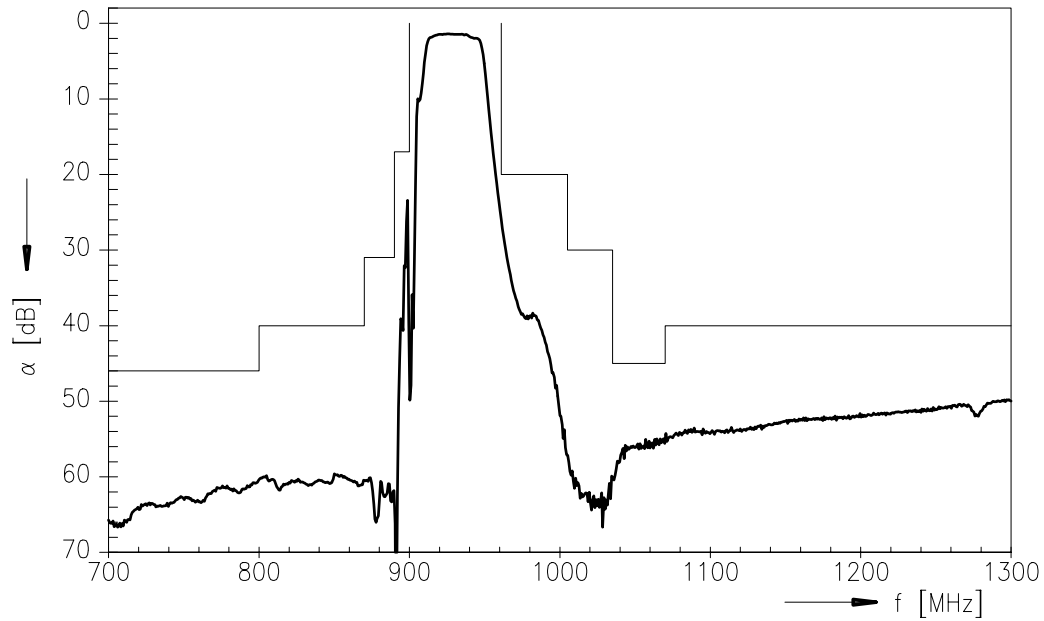
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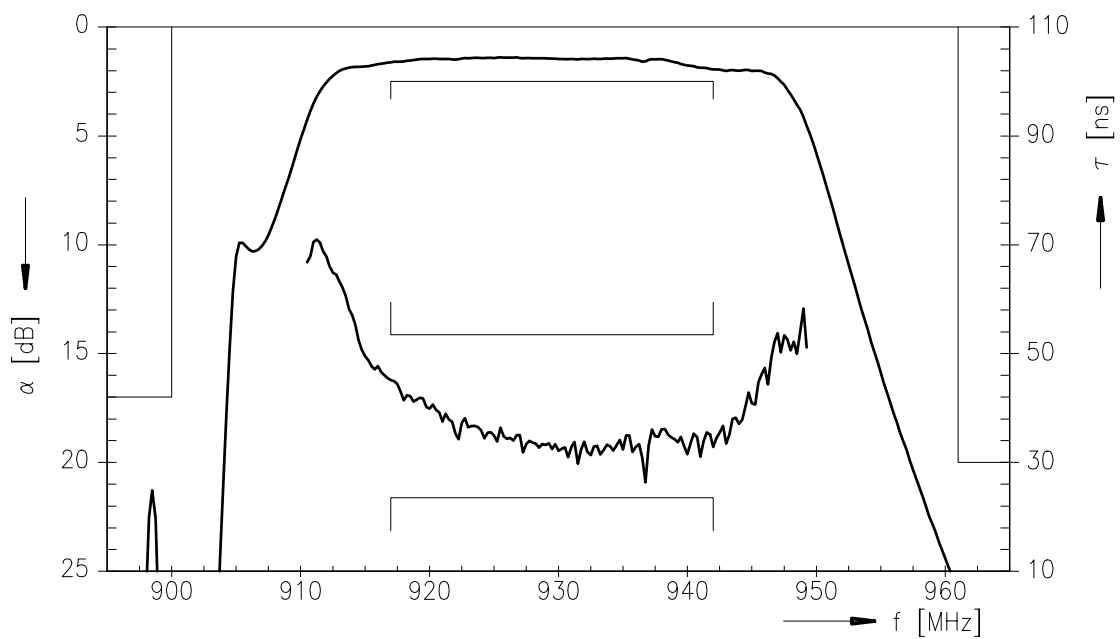
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Transfer function



Transfer function (pass band, $25 \pm 10^\circ \text{C}$)





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