EPCOS

SAW Components

Data Sheet B3868

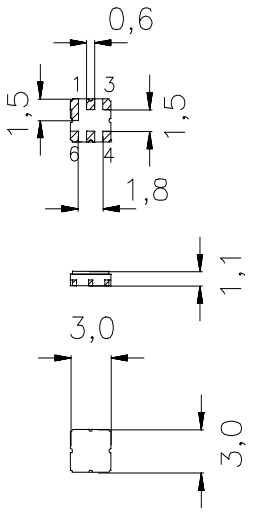
Ceramic package **DCC6C**

Features

- Low-loss RF filter for TETRA phone
- Usable bandwidth 25 MHz
- No matching required for operation at 50 Ω
- Ceramic package for **S**urface **M**ounted **T**echnology (**SMT**)
- Hermetically sealed ceramic package
- RoHS compliant

Terminals

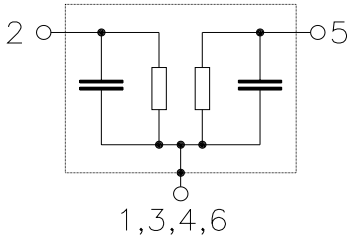
- Gold-plated Ni



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 **S**ensitive **D**evice (**ESD**)

Maximum ratings

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

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

Data Sheet

Characteristics

Operating temperature range: T_A = 25 ± 10 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Nominal frequency	f_N	—	929,5	—	MHz
Maximum insertion attenuation	α_{max}				
917,0 MHz ... 942,0 MHz		—	1,9	2,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
917,0 MHz ... 942,0 MHz		—	0,6	1,0	dB
Group delay ripple (p-p)	$\Delta\tau$				
917,0 MHz ... 942,0 MHz		—	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

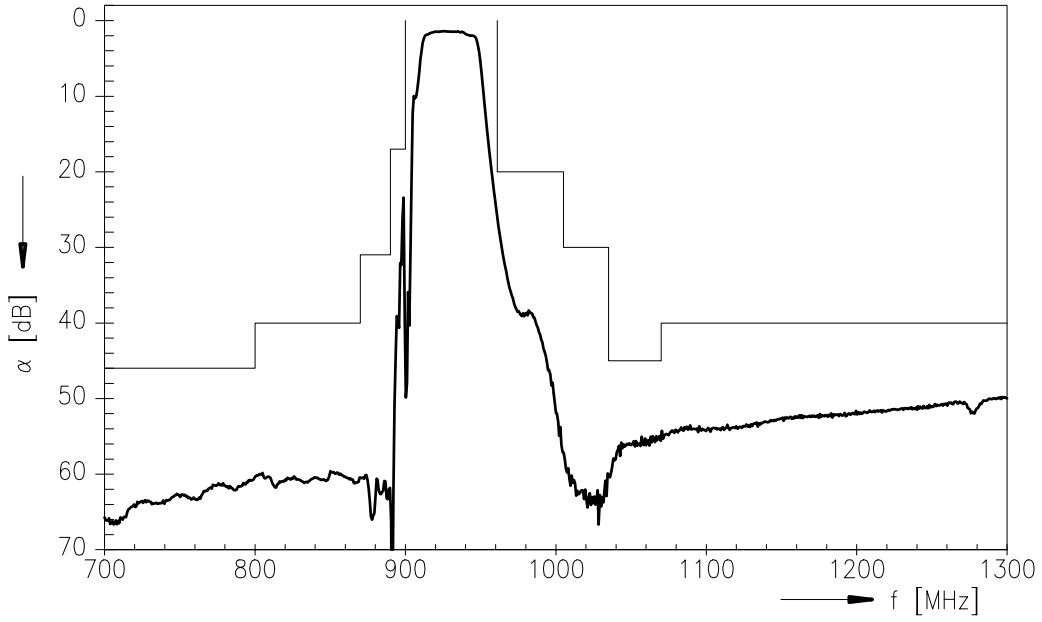
Data Sheet

Characteristics

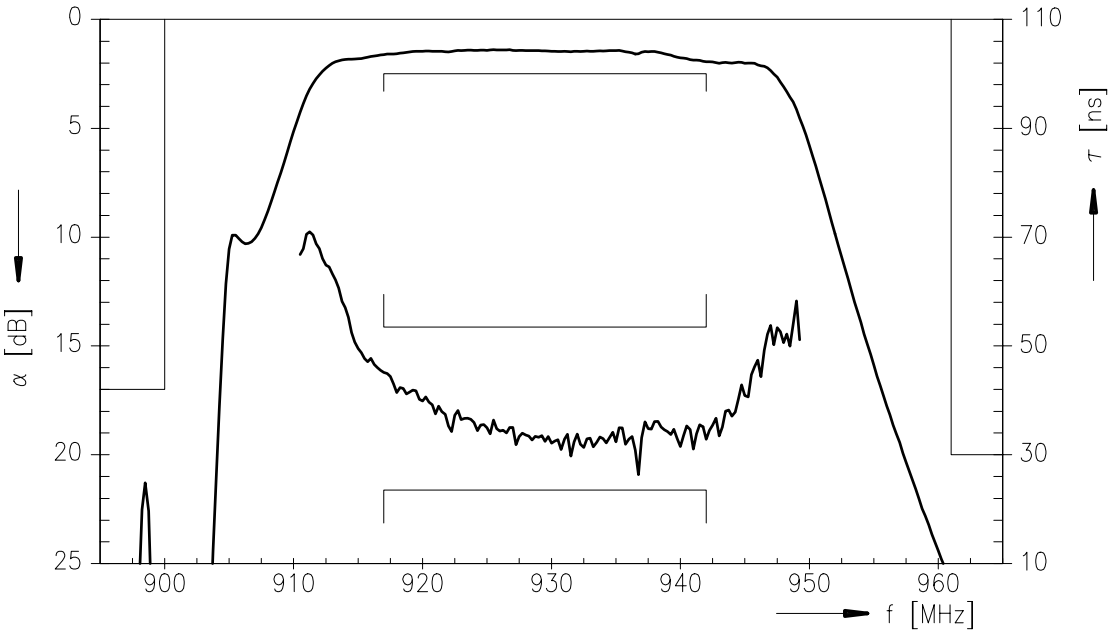
Operating temperature range: T_A = -30 to +85 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Nominal frequency	f_N	—	929,5	—	MHz
Maximum insertion attenuation	α_{max}				
917,0 MHz ... 942,0 MHz		—	2,2	3,3	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
917,0 MHz ... 942,0 MHz		—	0,7	1,2	dB
Group delay ripple (p-p)	$\Delta\tau$				
917,0 MHz ... 942,0 MHz		—	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

Transfer function



Transfer function (pass band, 25 ± 10 °C)



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This brochure replaces the previous edition.

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