EPCOS

SAW Components

Data Sheet B3859

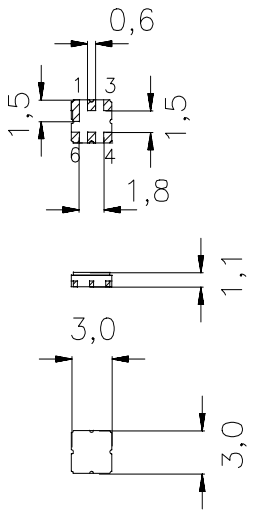
Ceramic package DCC6C

Features

- Low-loss RF filter for TETRA phone
- Usable bandwidth 10 MHz
- No matching required for operation at 50 Ω
- Package for Surface Mounted Technology (SMT)
- Hermetically sealed ceramic package

Terminals

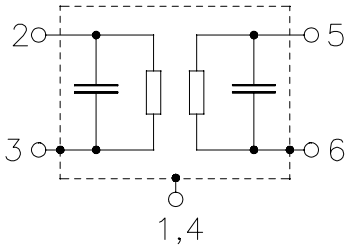
- Gold-plated



typ. Dimensions in mm, approx. weight 0,037 g

Pin configuration

2	Input
5	Output
1, 3, 4, 6	To be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B3859	B39941-B3859-U410	C61157-A7-A67	F61074-V8088-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}	0	V	
Source power (cw)	P_s	6	dBm	source impedance 50 Ω

Data Sheet

Characteristics

Operating temperature range: T_A = 25 ± 5 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Nominal frequency	f_N	—	937,0	—	MHz
Maximum insertion attenuation	α_{max}				
932,0 MHz ... 942,0 MHz		—	1,8	3,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
932,0 MHz ... 942,0 MHz		—	0,3	1,2	dB
Return loss (Input and Output)					
932,0 MHz ... 942,0 MHz		11,0	14,0	—	dB
Absolute attenuation	α_{abs}				
0,1 MHz ... 750,0 MHz		50	60	—	dB
750,0 MHz ... 800,0 MHz		46	60	—	dB
800,0 MHz ... 880,0 MHz		40	58	—	dB
880,0 MHz ... 905,0 MHz		31	36	—	dB
905,0 MHz ... 915,0 MHz		17	27	—	dB
915,0 MHz ... 922,0 MHz		8	16	—	dB
922,0 MHz ... 927,0 MHz		3	9	—	dB
947,0 MHz ... 952,0 MHz		4	9	—	dB
952,0 MHz ... 957,0 MHz		17	19	—	dB
957,0 MHz ... 980,0 MHz		21	23	—	dB
980,0 MHz ... 1025,0 MHz		26	35	—	dB
1025,0 MHz ... 1035,0 MHz		35	55	—	dB
1035,0 MHz ... 1760,0 MHz		40	46	—	dB
1760,0 MHz ... 3120,0 MHz		30	35	—	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 ... +10 ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

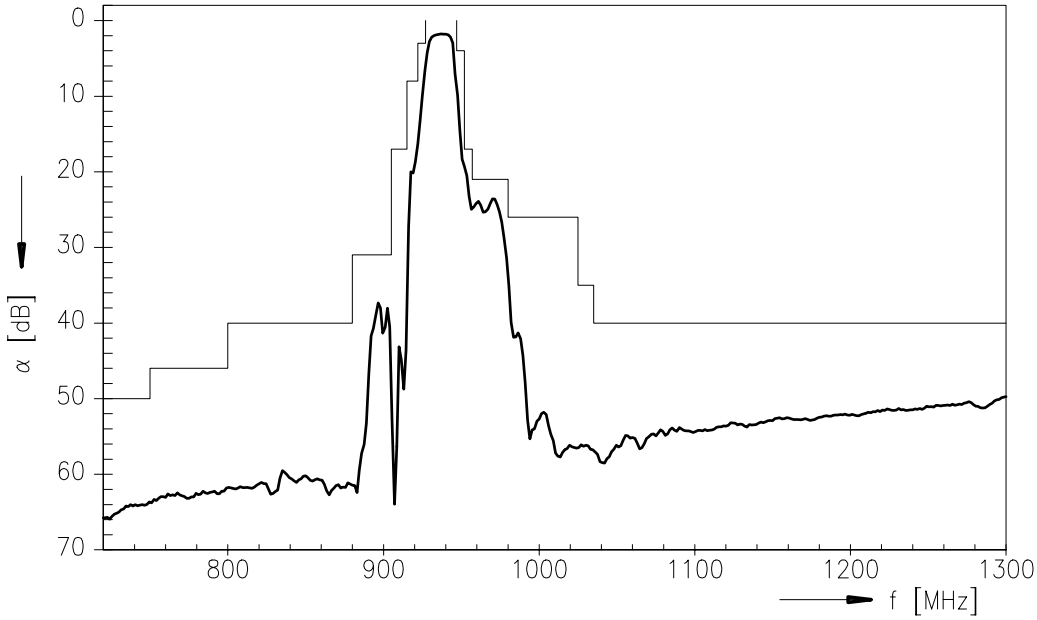
		min.	typ.	max.	
Nominal frequency	f_N	—	937,0	—	MHz
Maximum insertion attenuation	α_{max}				
932,0 MHz ... 942,0 MHz		—	2,1	3,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
932,0 MHz ... 942,0 MHz		—	0,65	1,2	dB
Return loss (Input and Output)					
932,0 MHz ... 942,0 MHz		9,0	12,0	—	dB
Absolute attenuation	α_{abs}				
0,1 MHz ... 750,0 MHz		50	60	—	dB
750,0 MHz ... 800,0 MHz		46	60	—	dB
800,0 MHz ... 880,0 MHz		40	58	—	dB
880,0 MHz ... 905,0 MHz		31	36	—	dB
905,0 MHz ... 915,0 MHz		17	27	—	dB
915,0 MHz ... 922,0 MHz		8	16	—	dB
922,0 MHz ... 927,0 MHz		3	9	—	dB
947,0 MHz ... 952,0 MHz		1,5	4	—	dB
952,0 MHz ... 957,0 MHz		9	15	—	dB
957,0 MHz ... 980,0 MHz		15	22	—	dB
980,0 MHz ... 1025,0 MHz		24	34	—	dB
1025,0 MHz ... 1035,0 MHz		35	55	—	dB
1035,0 MHz ... 1760,0 MHz		40	46	—	dB
1760,0 MHz ... 3120,0 MHz		30	35	—	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

Characteristics

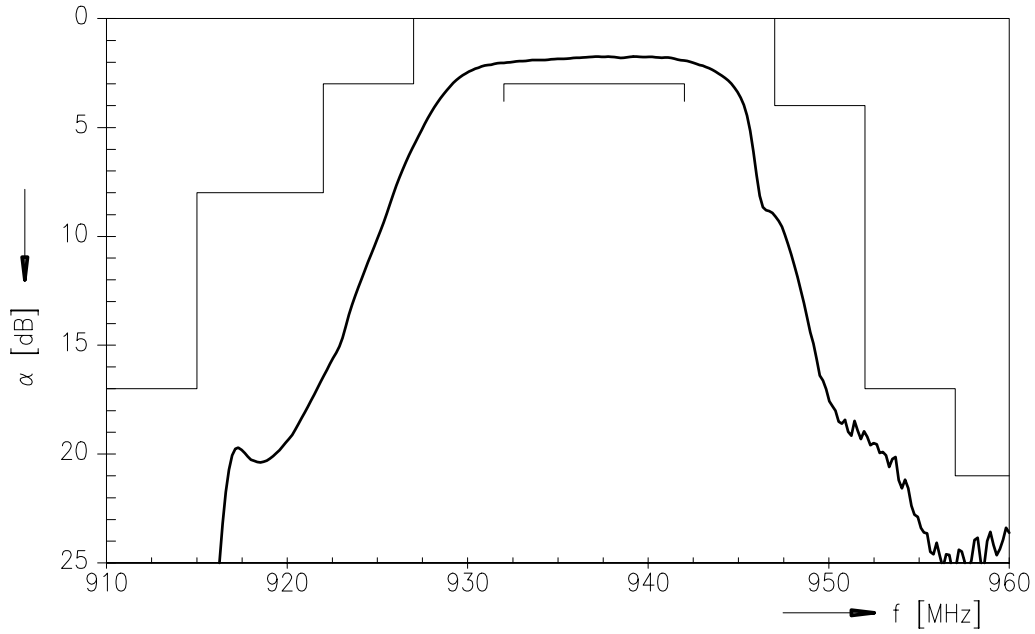
Operating temperature range: T_A = +35 ... +70 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Nominal frequency	f_N	—	937,0	—	MHz
Maximum insertion attenuation	α_{max}				
932,0 MHz ... 942,0 MHz		—	2,1	3,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
932,0 MHz ... 942,0 MHz		—	0,6	1,2	dB
Return loss (Input and Output)					
932,0 MHz ... 942,0 MHz		10,0	12,0	—	dB
Absolute attenuation	α_{abs}				
0,1 MHz ... 750,0 MHz		50	60	—	dB
750,0 MHz ... 800,0 MHz		46	60	—	dB
800,0 MHz ... 880,0 MHz		40	58	—	dB
880,0 MHz ... 905,0 MHz		31	36	—	dB
905,0 MHz ... 915,0 MHz		17	27	—	dB
915,0 MHz ... 922,0 MHz		3	12	—	dB
922,0 MHz ... 927,0 MHz		1,5	4	—	dB
947,0 MHz ... 952,0 MHz		5	10	—	dB
952,0 MHz ... 957,0 MHz		15	20	—	dB
957,0 MHz ... 980,0 MHz		21	23	—	dB
980,0 MHz ... 1025,0 MHz		26	35	—	dB
1025,0 MHz ... 1035,0 MHz		35	55	—	dB
1035,0 MHz ... 1760,0 MHz		40	46	—	dB
1760,0 MHz ... 3120,0 MHz		30	35	—	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 ± 5 °C)



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