EPCOS

SAW Components

Data Sheet B3862

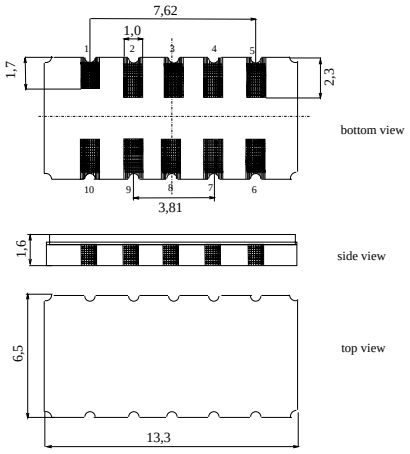
Ceramic package **DCC12A**

Features

- IF filter for WCDMA
- Low insertion loss
- Ceramic SMD package

Terminals

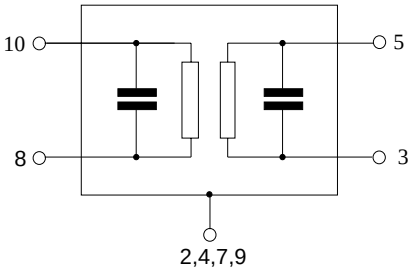
- Gold plated



Dimensions in mm, appr. weight 0,44 g

Pin configuration

10	Input
8	Input ground
5	Output
3	Output ground
2, 4, 7, 9	Case ground
1,6	Ground



Type	Ordering code	Marking and Package according to	Packing according to
B3862	B39510-B3862-H510	C61157-A7-A94	F61074-V8163-Z000

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

Maximum ratings

Operable temperature range	T	-40 / +85	˚C
Storage temperature range	T_{stg}	-40 / +85	˚C
DC voltage	V_{DC}	0	V
Source power	P_s	10	dBm

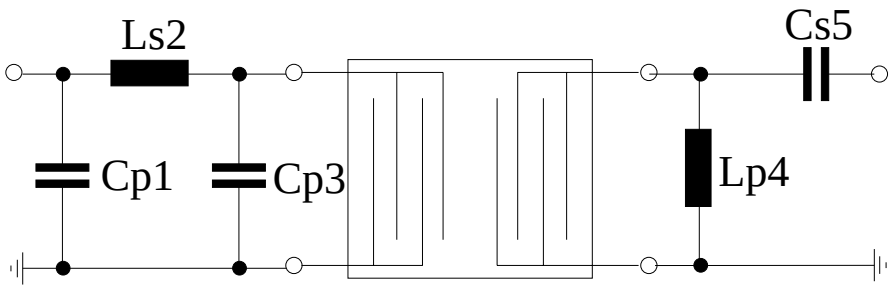
Characteristics

Operating temperature: T = -10 ... +85 °C
Terminating source impedance: Z_S = 50 Ω and matching network
Terminating load impedance: Z_L = 50 Ω and matching network

		min.	typ.	max.	
Nominal frequency	f_N	—	51,00	—	MHz
Minimum insertion attenuation (including matching network)	α_{min}	—	8,5	10,0	dB
Passband width					
$\alpha_{rel} \leq 2$ dB	B_{2dB}	—	2,4	—	MHz
$\alpha_{rel} \leq 20$ dB	B_{20dB}	—	3,5	3,84	MHz
Amplitude ripple (p-p)	$\Delta\alpha$				
$f_N \pm 1{,}00$ MHz		—	0,8	1,5	dB
Phase ripple (p-p)	$\Delta\varphi$				
$f_N \pm 1{,}00$ MHz		—	5	10	°
Unit to Unit Phase Slope Variation[1]	$\Delta\varphi_v$				
$f_N \pm 1{,}00$ MHz		—	± 1	± 5	°
Relative attenuation (relative to α_{min})	α_{rel}				
$f_N \pm$ 1,92 MHz ... $f_N \pm$ 10,0 MHz		22	25	—	dB
$f_N \pm$ 10,0 MHz ... $f_N \pm$ 20,0 MHz		30	60	—	dB
0,5 MHz ... 31,0 MHz		40	60	—	dB
71 MHz ... 160 MHz		40	45	—	dB
160 MHz ... 2200 MHz		20	30	—	dB
VSWR $f_N \pm 1{,}0$ MHz		—	1,5:1	2,3:1	
Temperature coefficient of frequency	TC_f	—	– 18	—	ppm/K

1) Variation of absolute phase at each frequency point compared with mean value of each production lot. Additional constant offset for all frequency points of up to ± 5° is allowed.

Matching network: (element values depend on PCB layout)

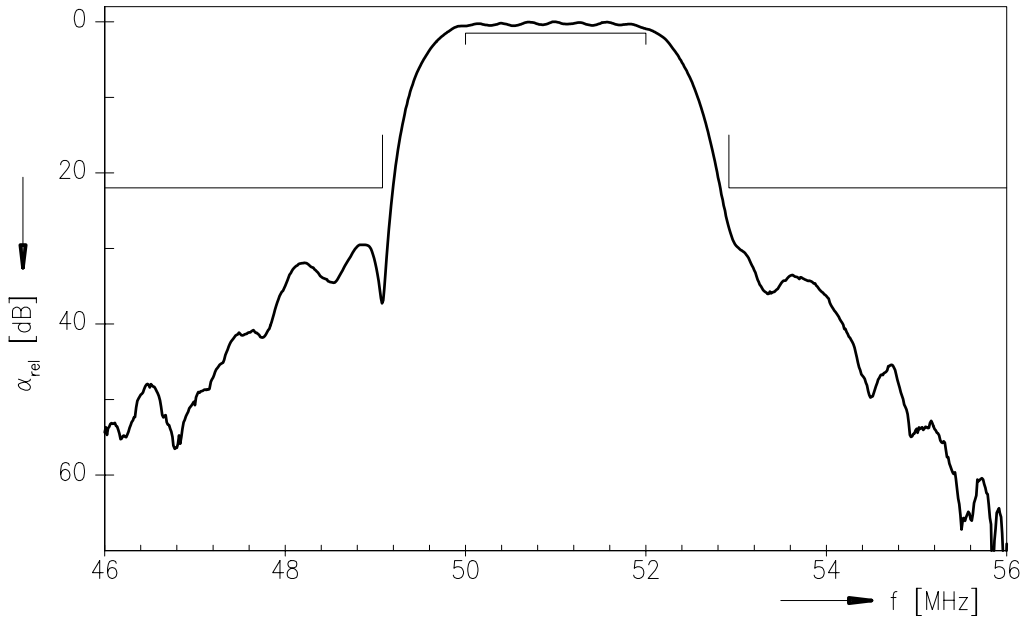


C_{p1} = 100 pF
L_{s2} = 390 nH

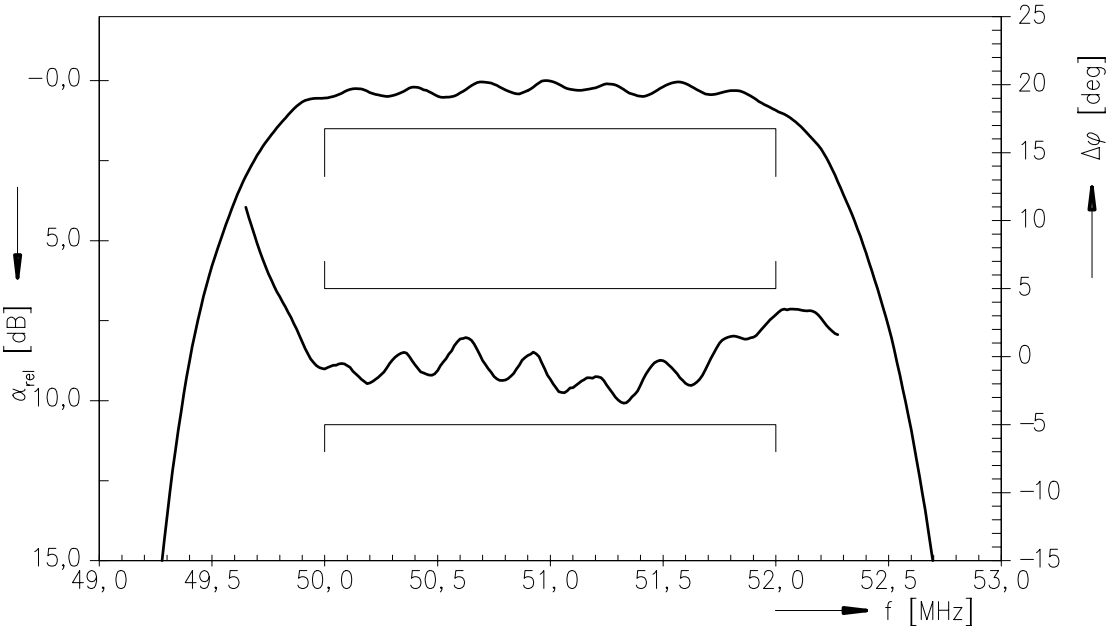
C_{p3} = 1,8 pF
L_{p4} = 180 nH

C_{s5} = 18 pF

Transfer function



Transfer function (pass band)



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