EPCOS

IF Filters for Cordless Phones and ISM-Band Application

Series/Type: **B8100**

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39111B8100L100	B39111B4542Z910	2004-05-19	2004-09-30	2004-12-31

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.

B39111B8100L100

    Date of withdrawal: 19−MAY−04

    Deadline for last orders: 30−SEP−04

    Last shipments: 31−DEC−04

"B8100"

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you in selecting a suitable substitute. The addresses of the sales offi
at www.epcos.com/sales.

SAW Components

Data Sheet B 8100

Data Sheet

- **S**urface **M**ounted **T**echnology (**SMT**)
- Standard IC small outline (SO) package
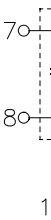- Balanced and unbalanced operation possible

Terminals

"B8100"ned CuFe alloyv

1,27

8×1,27 = 10,

13,7
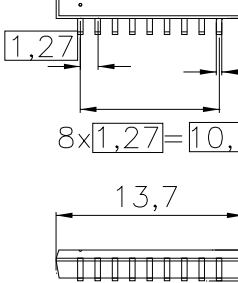
Dimensions in mm, a

Pin configuration

7	Input
8	Input ground or balanced input
16	Output
17	Output ground or balanced output
1,4,5,6,9,10 13,14,15,18	Chip carrier – ground
2,3,11,12	not connected

7○

8○

1

Type	Ordering code	Marking and Package according to	Packin accord
B8100	B39111-B8100-L100	C61157-A2-A4	F61074

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

Maximum ratings

Operable temperature range	T	–25/+65	˚C	
Storage temperature range	T_{stg}	–40/+85	˚C	
DC voltage	V_{DC}	5	V	
Source power	P_s	10	dBm	

Nominal frequency	f_N	—	110,59
Center frequency	f_c	110,48	110,59
(center frequency between 10 dB points)			
Insertion attenuation at f_N	α_N	—	20,9
(including losses in matching network)		—	(13,5*)
Passband width	B_{3dB}	—	1,28
	B_{30dB}	—	2,40
Group delay ripple (p-p)	$\Delta\tau$		
$\quad f_N$ - 600 kHz ... f_N + 600 kHz		—	180
		—	(300*)
Relative attenuation (relative to α_N)	α_{rel}		
$\quad f_N$ - 576 kHz ... f_N + 576 kHz		—	2,0
$\quad f_N \pm 576$ kHz ... $f_N \pm 700$ kHz		—	—
$\quad f_N \pm 1,6$ MHz ... $f_N \pm 3,1$ MHz		32	38
$\quad f_N \pm 3,1$ MHz ... $f_N \pm 4,6$ MHz		40	44
$\quad f_N \pm 4,6$ MHz ... $f_N \pm 20$ MHz		45	50
$\quad f_N \pm \quad 1,728$ MHz		32	38
$\quad f_N \pm 2\times1,728$ MHz		42	47
$\quad f_N \pm 3\times1,728$ MHz		48	53
Impedance at f_N			
$\quad$ Input: $Z_{IN} = R_{IN} \parallel C_{IN}$		—	600 $\parallel$ 8,5
$\quad$ Output: $Z_{OUT} = R_{OUT} \parallel C_{OUT}$		—	140 $\parallel$19,0
Temperature coefficient of frequency	TC_f	—	– 18

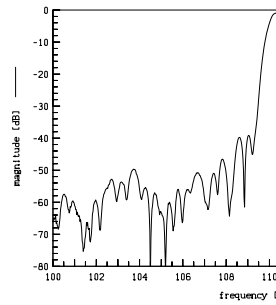 ***) with matching network to 50** Ω (element values depend on PCB layout):
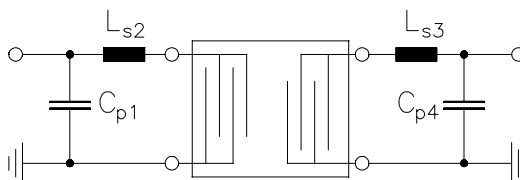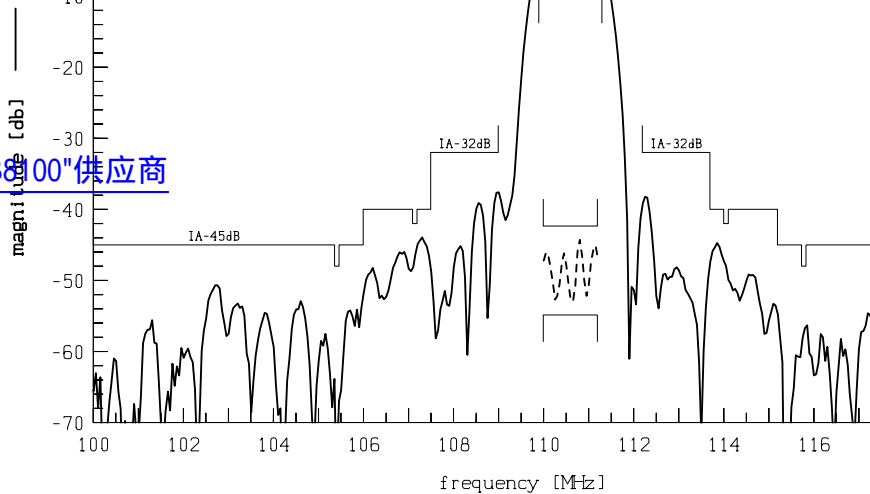
Transfer function (pass band):
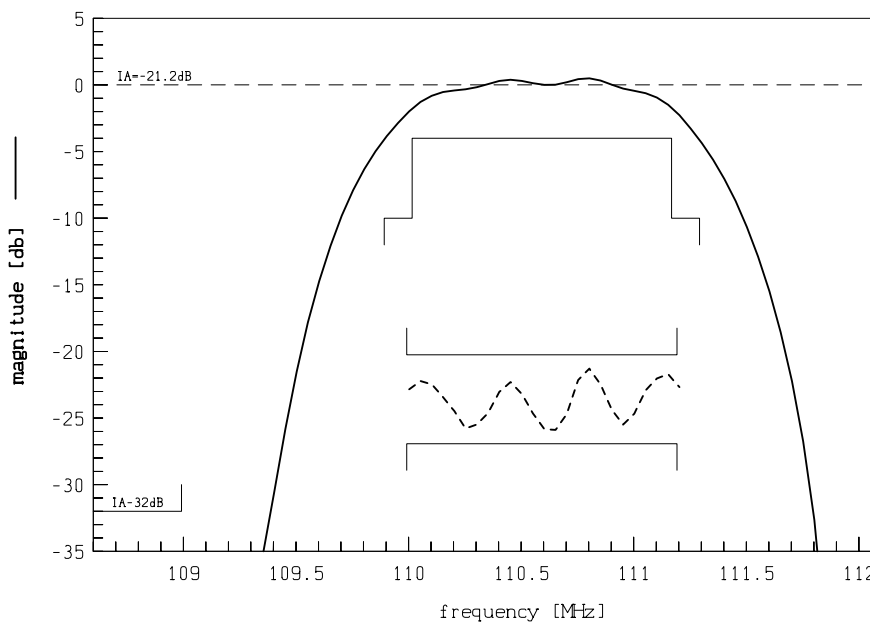
Balanced-balanced operation:
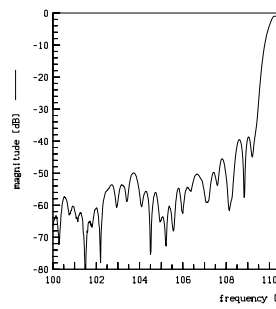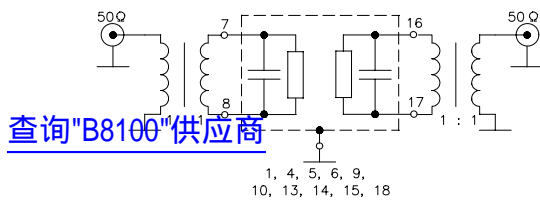
"B8100"

7   16

8   17

1 : 1   1 : 1

1, 4, 5, 6, 9,
10, 13, 14, 15, 18

50 Ω   50 Ω

Balanced-unbalanced operation:

50 Ω   50 Ω

7   16

8   17

1 : 1

1, 4, 5, 6, 9,
10, 13, 14, 15, 18

Unbalanced-unbalanced operation

50 Ω   50 Ω

7   16

8   17

1, 4, 5, 6, 9,
10, 13, 14, 15, 18

5 May 08, 2001
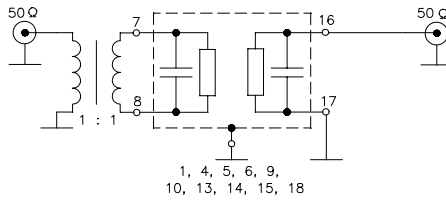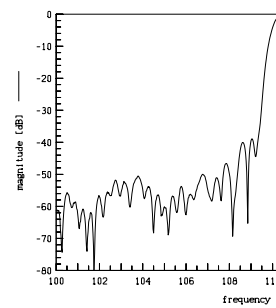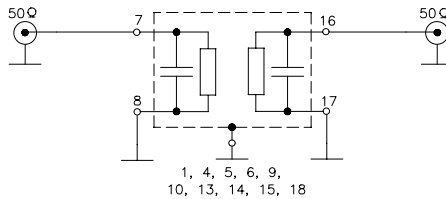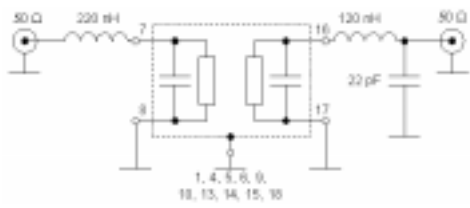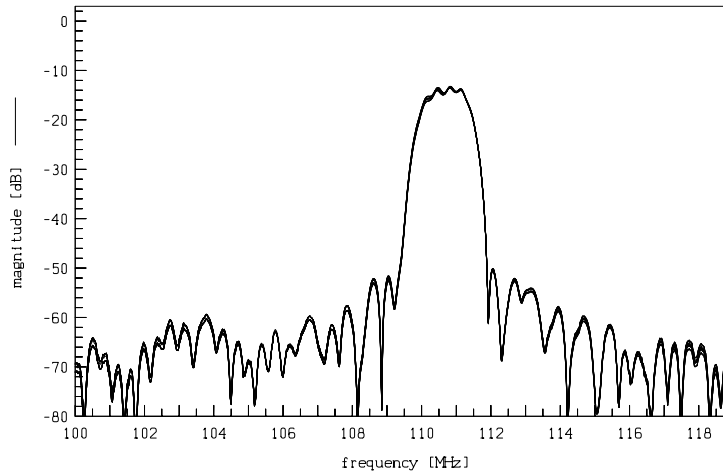
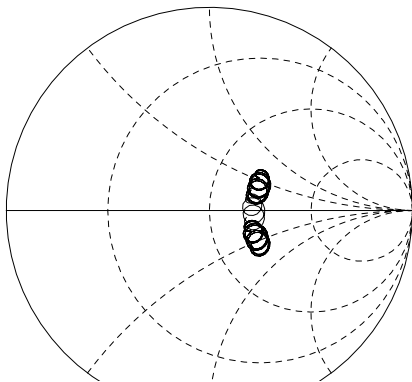Transfer function of matched filter (S_{21}):

Impedance variation of matched filter (in passband):

S_{11}: S_{22}: