EPCOS

Wireless Local Loop/Broadband Access Filters

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39111B4540Z710		2006-12-01	2007-02-28	2007-05-31

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.

SAW Components

Data Sheet B4540

- Bandpass IF filter for cordless telephone
- Channel selection in DECT system
- Ceramic package for **S**urface **M**ounted **T**echnology **(SMT)**

Terminals

- Ni, gold-plated

Dimensions in mm, a

Pin configuration

10	Input	4o–
9	Input ground or balanced input	
5	Output	
4	Output ground or balanced output	5o–
1,3,6,8	Case - ground	
2,7	Not connected	

Type	Ordering code	Marking and Package according to	Packi accor
B4540	B39111-B4540-Z710	C61157-A7-A49	F6107

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

Maximum ratings

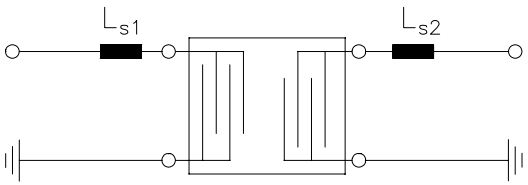
Operable temperature range	T	– 40/+ 85	°C	
Storage temperature range	T_{stg}	– 40/+ 85	°C	
DC voltage	V_{DC}	0	V	
Source power	P_s	10	dBm	source impe

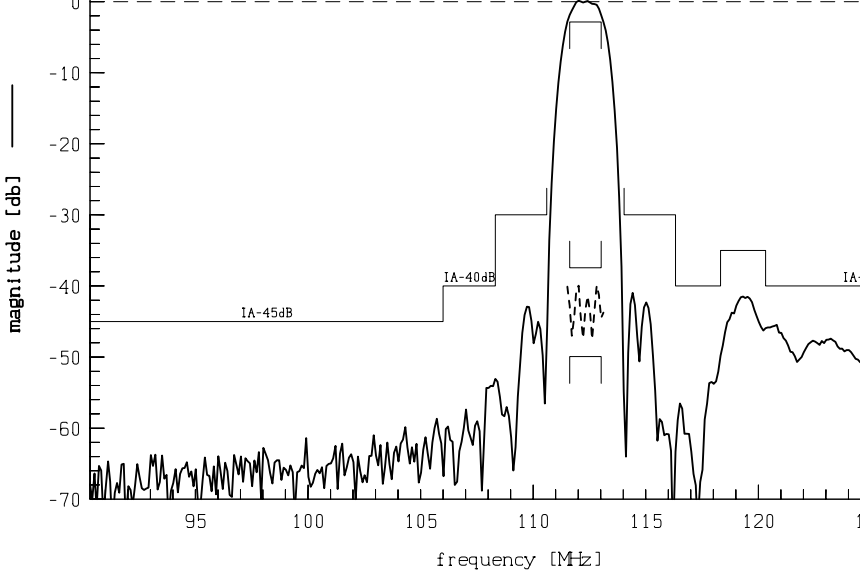
Terminating load impedance: Z_L = 0,9 kΩ || 340 nH

		min.	typ.
Nominal frequency	f_N	—	112,32
Insertion attenuation at f_N (including losses in matching network) Reference level for the following data	α_N	—	13,5
Pass bandwidth	B_{3dB}	—	1,6
Group delay ripple (p-p)	$\Delta\tau$		
f_N -700,0 kHz .. f_N+700,0 kHz		—	100
Relative attenuation (relative to α_N)	α_{rel}		
f_N – 30,00 MHz ... f_N – 6,32 MHz		45	59
f_N – 6,32 MHz ... f_N – 4,00 MHz		40	53
f_N – 4,00 MHz ... f_N – 1,72 MHz		30	42
f_N + 1,72 MHz ... f_N + 4,00 MHz		30	41
f_N + 4,00 MHz ... f_N + 6,00 MHz		40	50
f_N + 6,00 MHz ... f_N + 8,00 MHz		35	41
f_N + 8,00 MHz ... f_N + 30,00 MHz		40	45
f_N + 17,28 MHz		45	57
Impedance at f_N			
Input: Z_{IN} = R_{IN} || C_{IN}		—	3,9 || 5,0
Output: Z_{OUT} = R_{OUT} || C_{OUT}		—	3,3 || 6,1
Temperature coefficient of frequency [1]	TC_f	—	– 0,03
Turnover temperature	T_0	—	30

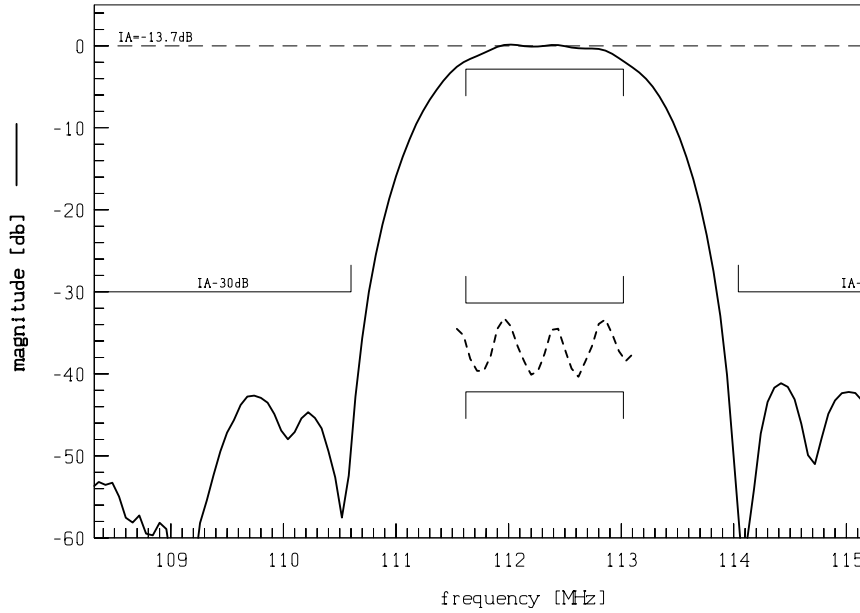
[1] Temperature dependance of f_c: $f_c(T) = f_c(T_0)(1 + TC_f(T - T_0)^2)$

Matching network to 50 Ω (element values depend on pcb layout)





Transfer function (pass band)



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