



Wireless Local Loop/Broadband Access Filters

Series/Type: **B4540**

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39111B4540Z710		2001-05-25	2001-06-30	2001-09-30

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.



Withdrawn Products

The following products presented in this data sheet are being withdrawn:

B39111B4540Z710

Date of withdrawal: 25-MAY-01

Deadline for last orders: 30-JUN-01

Last shipments: 30-SEP-01

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of the sales offices are given on the Internet at www.epcos.com/sales.



SAW Components

Data Sheet B4540





SAW Components

B4540

Bandpass Filter for Mobile Communication

112,32 MHz

Data Sheet

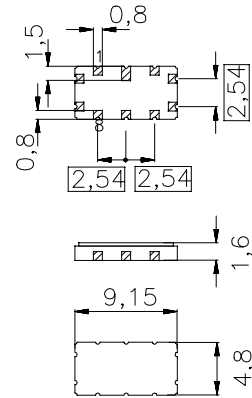
Ceramic package **QCC10B**

Features

- Bandpass IF filter for cordless telephone
- Channel selection in DECT system
- Ceramic package for **Surface Mounted Technology (SMT)**

Terminals

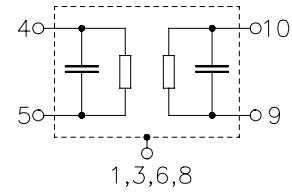
- Ni, gold-plated



Dimensions in mm, approx. weight 0,23 g

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B4540	B39111-B4540-Z710	C61157-A7-A49	F61074-V8035-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 40/+ 85	°C	source impedance 50 Ω
Storage temperature range	T_{stg}	- 40/+ 85	°C	
DC voltage	V_{DC}	0	V	
Source power	P_s	10	dBm	



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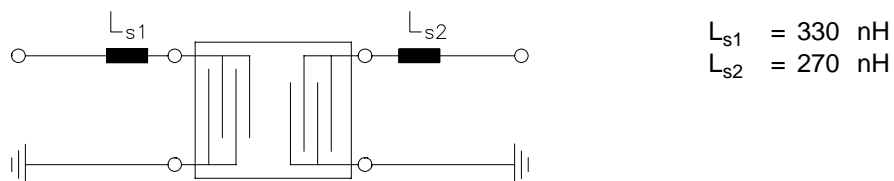
Characteristics

Operating temperature range: $T = -40$ to $+85$ °C
 Terminating source impedance: $Z_S = 1,1$ k Ω || 390 nH
 Terminating load impedance: $Z_L = 0,9$ k Ω || 340 nH

		min.	typ.	max.	
Nominal frequency	f_N	—	112,32	—	MHz
Insertion attenuation at f_N (including losses in matching network) Reference level for the following data	α_N	—	13,5	15,0	dB
Pass bandwidth	B_{3dB}	—	1,6	—	MHz
Group delay ripple (p-p) $f_N - 700,0$ kHz .. $f_N + 700,0$ kHz	$\Delta\tau$	—	100	150	ns
Relative attenuation (relative to α_N)	α_{rel}				
$f_N - 30,00$ MHz ... $f_N - 6,32$ MHz		45	59	—	dB
$f_N - 6,32$ MHz ... $f_N - 4,00$ MHz		40	53	—	dB
$f_N - 4,00$ MHz ... $f_N - 1,72$ MHz		30	42	—	dB
$f_N + 1,72$ MHz ... $f_N + 4,00$ MHz		30	41	—	dB
$f_N + 4,00$ MHz ... $f_N + 6,00$ MHz		40	50	—	dB
$f_N + 6,00$ MHz ... $f_N + 8,00$ MHz		35	41	—	dB
$f_N + 8,00$ MHz ... $f_N + 30,00$ MHz		40	45	—	dB
$f_N + 17,28$ MHz		45	57	—	dB
Impedance at f_N					
Input: $Z_{IN} = R_{IN} C_{IN}$		—	3,9 5,0	—	k Ω pF
Output: $Z_{OUT} = R_{OUT} C_{OUT}$		—	3,3 6,1	—	k Ω pF
Temperature coefficient of frequency ¹⁾	TC_f	—	-0,03	—	ppm/K ²
Turnover temperature	T_0	—	30	—	°C

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

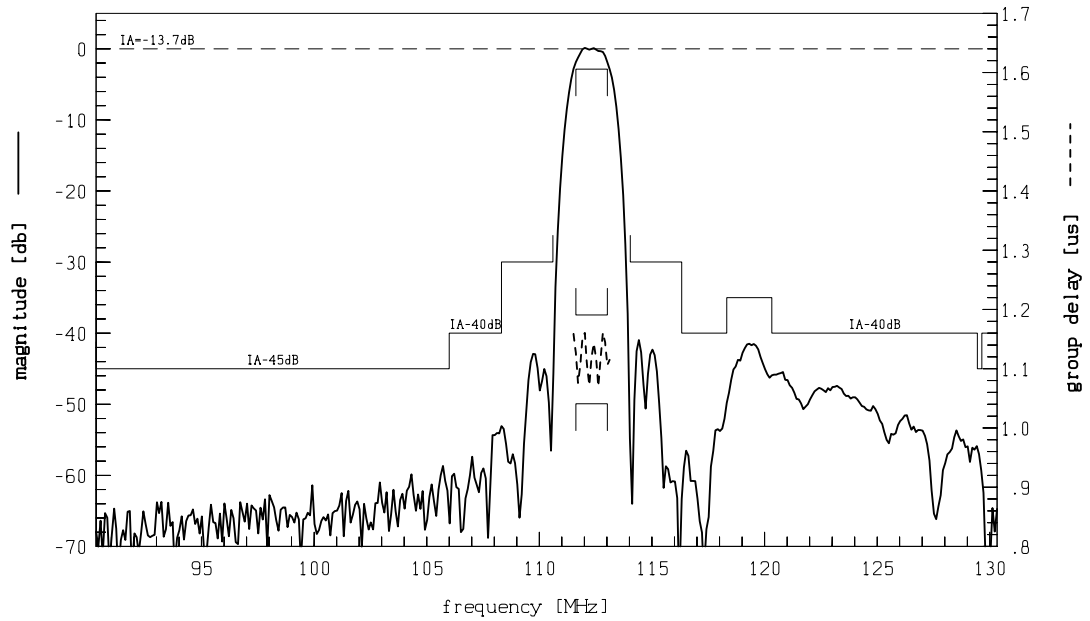
Matching network to 50 Ω (element values depend on pcb layout)



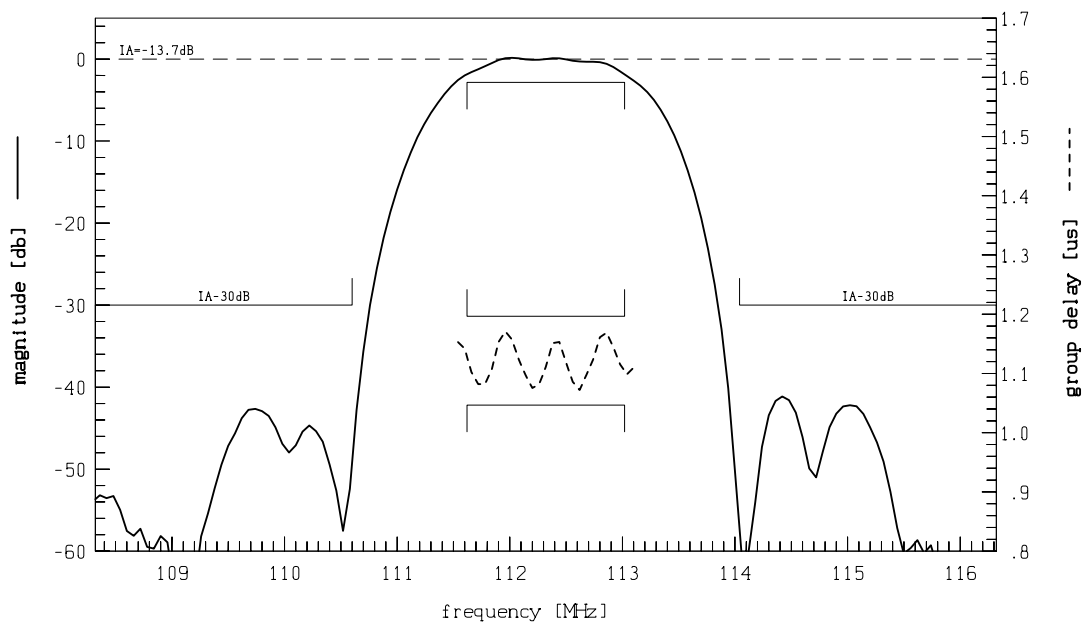


Data Sheet

Transfer function



Transfer function (pass band)





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Published by EPCOS AG
Surface Acoustic Wave Components Division, SAW MC IS
P.O. Box 80 17 09, D-81617 München

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For questions on technology, prices and delivery please contact the sales offices of EPCOS AG or the international representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our sales offices.