EPCOS

IF Filters for Basestations

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39401B5002U310		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.

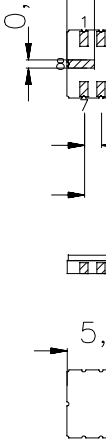
SAW Components

Data Sheet B5002

- Low-loss IF filter for W-CDMA base station, Tx
- 20 MHz usable bandwidth
- Very low passband ripple
- Ceramic SMD package

Terminals

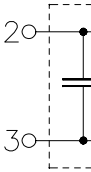
- Gold plated



Dim. in mm,

Pin configuration

2	Input
3	Input ground
6	Output
7	Output ground
1, 5	To be grounded
4, 8	Case ground



Type	Ordering code	Marking and Package according to	Packi accor
B5002	B39401-B5002-U310	C61157-A7-A56	F6107

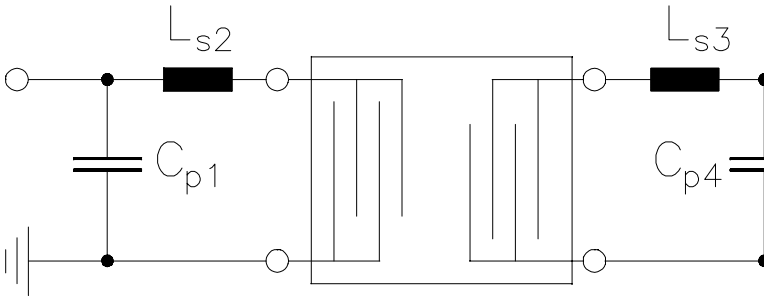
Electrostatic **S**ensitive **D**evice (**ESD**)

Maximum ratings

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

Operating temperature range: T = -40 .. +85 °C
Terminating source impedance: Z_S = 50 Ω unbalanced and matc
Terminating load impedance: Z_L = 50 Ω unbalanced and matc

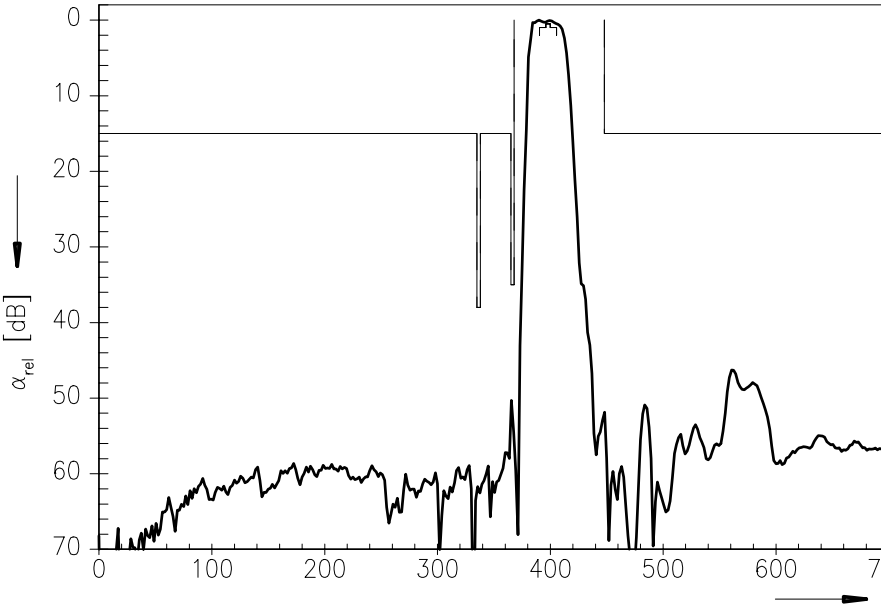
		min.	typ.
Nominal frequency	f_N	—	398,0
Minimum insertion attenuation	α_{min}		
f_N - 7,50 MHz ... f_N + 7,50 MHz		—	3,3
Maximum insertion attenuation (in passband)	α_{max}		
f_N - 7,50 MHz ... f_N + 7,50 MHz		—	3,8
Pass bandwidth			
$\alpha_{rel} \leq 1{,}0$ dB	$B_{1,0dB}$	20	26
Amplitude ripple (p-p)	$\Delta\alpha$		
f_N - 1,92 MHz ... f_N + 1,92 MHz		—	0,2
f_N - 7,50 MHz ... f_N + 7,50 MHz		—	0,4
Deviation from linear phase (rms)	$\Delta\varphi$		
f_N - 1,92 MHz ... f_N + 1,92 MHz		—	0,1
f_N - 7,50 MHz ... f_N + 7,50 MHz		—	1,0
Relative attenuation (relative to α_{min})	α_{rel}		
100 MHz ... 335 MHz		15	60
335 MHz ... 338 MHz		38	60
338 MHz ... 365 MHz		15	60
365 MHz ... 368 MHz		35	45
448 MHz ... 3 GHz		15	45
Input return loss (in passband)			
f_N - 7,50 MHz ... f_N + 7,50 MHz		6	8
Output return loss (in passband)			
f_N - 7,50 MHz ... f_N + 7,50 MHz		8	10
Temperature coefficient of frequency	TC_f	—	– 70



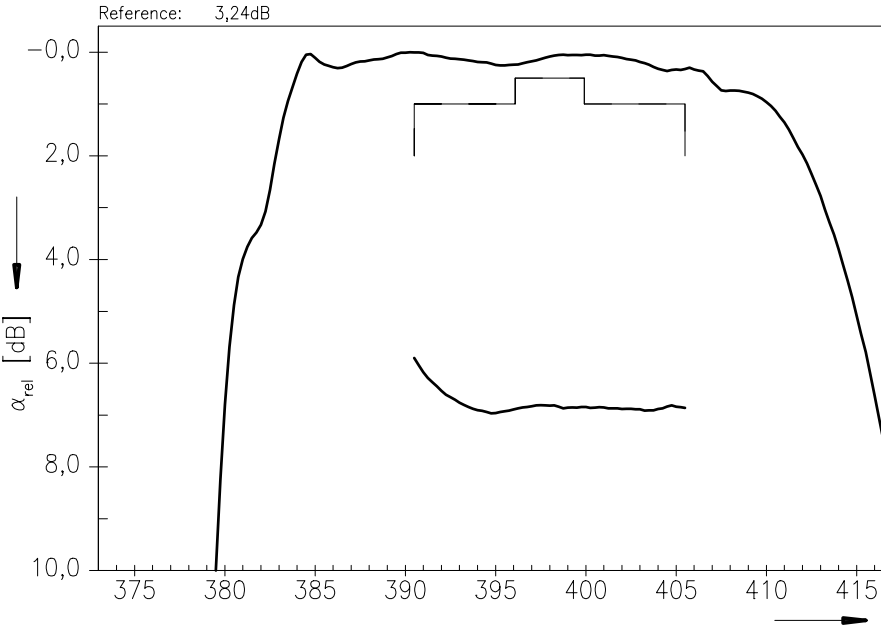
C_{p1} = 3,3 pF
L_{s2} = 10 nH

L_{s3} = 12 n
C_{p4} = 2,2 p

Element values depend upon board layout



Transfer function (pass band)



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the type in question please also contact one of our Sales Offices.