EPCOS

IF Filters for CDMA Cellular Phones

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39131B4957H710		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.

EPCOS

SAW Components

Data Sheet B4957

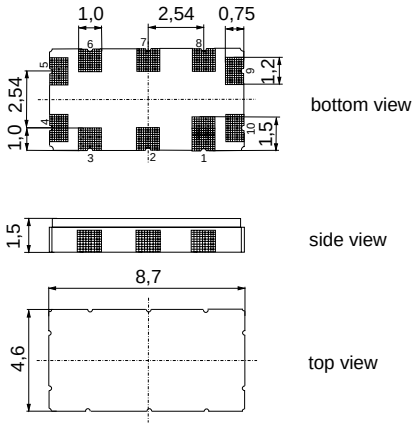
Features

- IF filter for mobile telephone
- Channel selection in CDMA systems
- High rejection, small size
- Low insertion attenuation, low amplitude ripple
- Filter surface passivated
- Package for **S**urface **M**ounted **T**echnology (**SMT**)

Terminals

- Gold plated

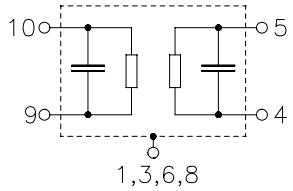
SMD package **QCC10E**



Dimensions in mm, approx. weight 0,23 g

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B4957	**B39131-B4957-H710**	C61157-A7-A127	F61074-V8192-Z000

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

Maximum ratings

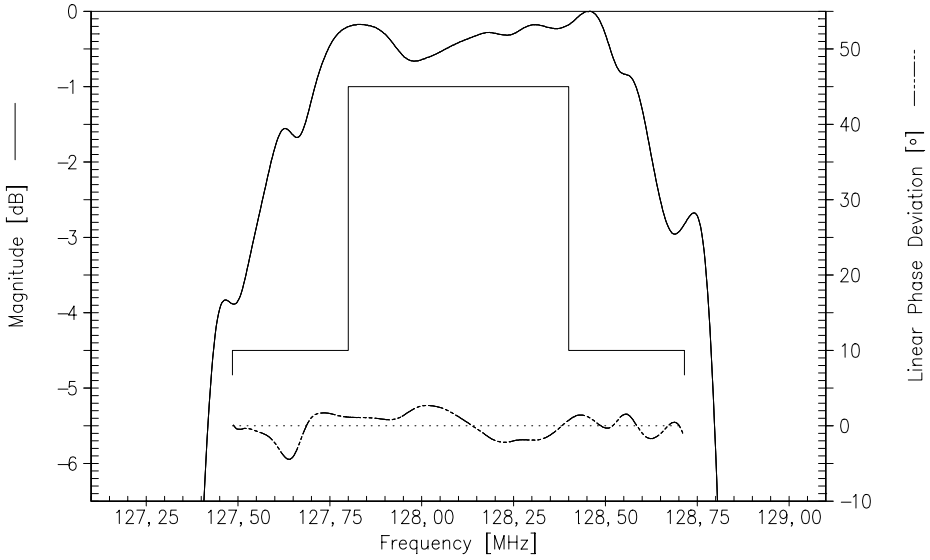
Operable temperature range	T	– 40/+ 85	˚C
Storage temperature range	T_{stg}	– 40/+ 85	˚C
DC voltage	V_{DC}	5	V
Source power	P_s	10	dBm

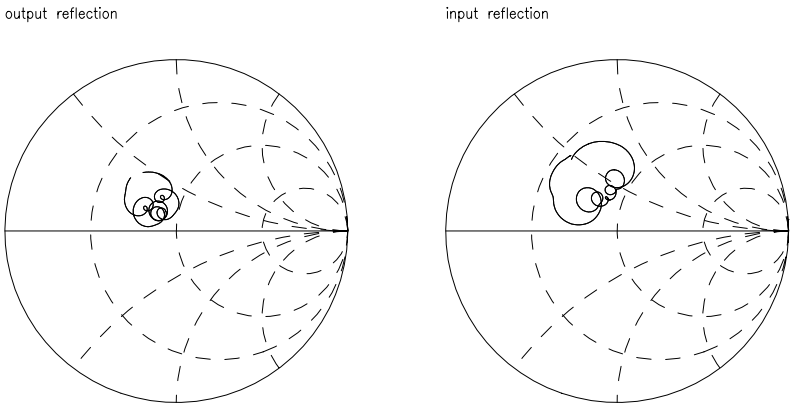
Operating temperature range: T = -30˚C ... +85 ˚C
Terminating source impedance: Z_S = 1370 Ω || 170 nH
Terminating load impedance: Z_L = 760 Ω || 119 nH

		min.	typ.	max.	
Nominal frequency	f_N	—	128,1	—	MHz
Minimum insertion attenuation (including loss in matching network without loss in balun)	α_{min}	—	9,2	10,5	dB
Amplitude ripple	$\Delta\alpha$				
f_N – 0,3 MHz ... f_N + 0,3 MHz		—	0,6	1,0	dB
Phase linearity (rms deviation)					
f_N – 0,615MHz ... f_N + 0,615 MHz		—	1,6	3,0	°
Relative attenuation (relative to α_{min})	α_{rel}				
$f_N \pm$ 0,615MHz		—	4,0	4,5	dB
10,0 MHz ... f_N – 5,0 MHz		45[1)]	48	—	dB
f_N – 5,0 MHz ... f_N – 0,9 MHz		37	39	—	dB
f_N – 2,05 MHz		37	49	—	dB
f_N – 1,7 MHz		37	44	—	dB
f_N – 1,25 MHz		37	52	—	dB
f_N – 0,9 MHz		37	43	—	dB
f_N + 0,9 MHz		37	40	—	dB
f_N + 1,25 MHz		37	53	—	dB
f_N + 1,7 MHz		37	44	—	dB
f_N + 2,05 MHz		37	54	—	dB
f_N + 0,9 MHz ... f_N + 5,0 MHz		37	40	—	dB
f_N + 5,0 MHz ... f_N + 70,0 MHz		45[2)]	48	—	dB
172,485 MHz ... 173,715 MHz		60	75	—	dB
207,485 MHz ... 208,715 MHz		48	50	—	dB

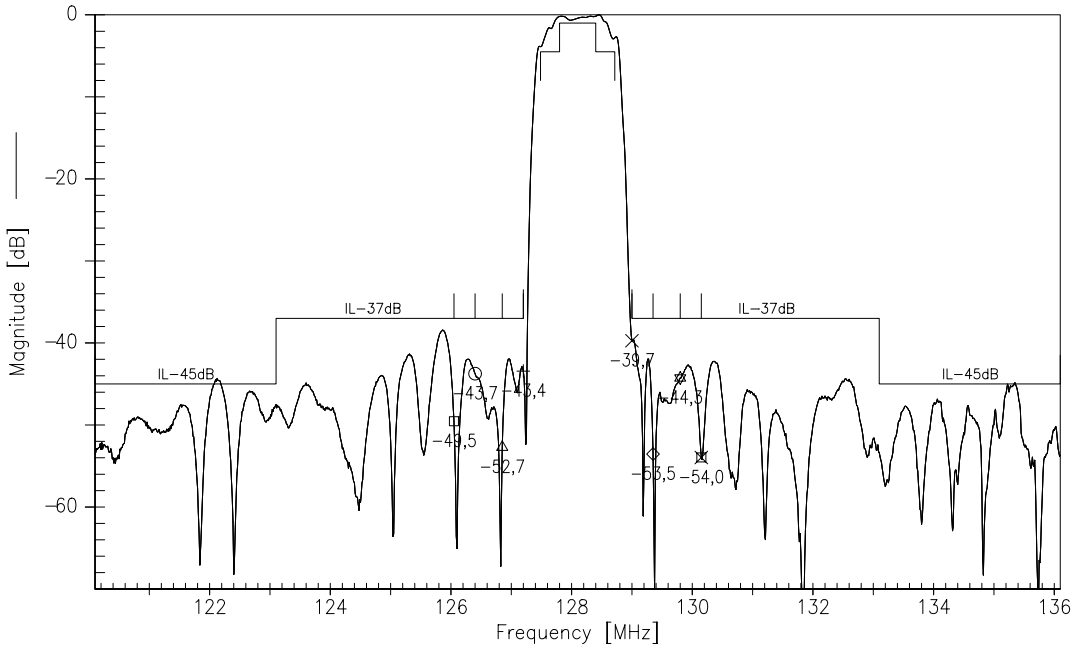
1) exception: 122,1 MHz +/- 200 kHz
2) exception: 135,2 MHz +/- 300 kHz

Transfer function: passband, single ended (pin 5) - balanced (pins 9,10)

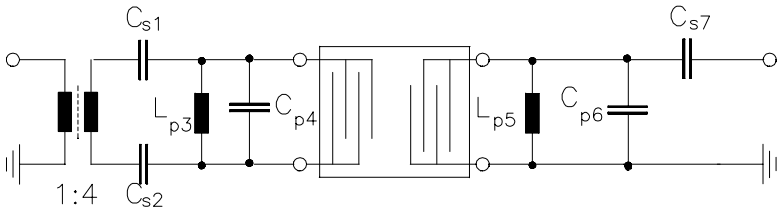




Transfer function: wide band, single ended (pin 5) - balanced (pins 9,10)



Test matching network to 50Ω
(Element values depend on pcb layout. Input is at the right hand side)



C_{s1} = 5,6 pF
C_{s2} = 6,8 pF
L_{p3} = 82 nH || 5,6 pF
L_{p5} = 68 nH || 2,2 pF
C_{s7} = 6,8 pF

Published by EPCOS AG
Corporate Communications, P.O. Box 80 17 09, 81617 Munich, GERMANY
✍ ++49 89 636 09, FAX (0 89) 636-2 26 89

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This brochure replaces the previous edition.

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