

#### Tx IF Filters for Cellular Phones

Series/Type: B4944

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product		Deadline Last Orders	Last Shipments	
B39181B4944Z810		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.



## Withdrawn Products

The following products presented in this data sheet are being withdrawn:

#### B39181B4944Z810

Date of withdrawal: 19–MAY–04 Deadline for last orders: 30–SEP–04 Last shipments: 31–DEC–04

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.



Data Sheet B4944





B4944

**Low-Loss Filter for Mobile Communication** 

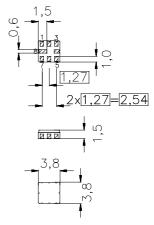
181,80 MHz

**Data Sheet** 



#### **Features**

- Low-loss IF filter for mobile telephone TDMA systems, transmit path
- Low amplitude ripple
- Usable passbands 30 kHz
- Balanced to balanced operation
- $\bullet$  Impedance transformation from 100  $\Omega$  to 200  $\Omega$
- Ceramic package for Surface Mounted Technology (SMT)



Ceramic package QCC8B

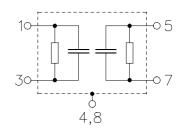
#### **Terminals**

Ni, gold-plated

Dimensions in mm, approx. weight 0,07 g

#### Pin configuration

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



Туре	Ordering code	Marking and Package according to	Packing according to	
B4944	B39181-B4944-Z810	C61157-A7-A46	F61074-V8037-Z000	

Electrostatic Sensitive Device (ESD)

#### **Maximum ratings**

Operable temperature range	Τ	- 30 / + 85	°C	
Storage temperature range	$T_{stg}$	<b>- 40 / + 85</b>	°C	
DC voltage	$V_{DC}$	3	V	
Source power	$P_{IN}$	0	dBm	source impedance 50 $\Omega$



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181,80 MHz

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#### **Characteristics (with matching inductor)**

 $T = -30 \text{ to} + 85^{\circ}\text{C}$   $Z_{\text{S}} = 100 \Omega$   $Z_{\text{L}} = 200 \Omega \parallel 330 \text{ nH}$ Operating temperature range:

Terminating source impedance:

Terminating load impedance:

	min.	typ.	max.	
Center frequency f <sub>c</sub>	_	181,44	_	MHz
	_	1,6	2,0	dB
Amplitude ripple (p-p) $$\Delta\alpha$$ 181,785 181,815 MHz	_	0,1	0,2	dB
Attenuation $\alpha$				
50,0 164,0 MHz	37,0	45,0	_	dB
198,0 201,0 MHz	25,0	30,0	_	dB
201,0 320,0 MHz	37,0	45,0	_	dB
360,0 550,0 MHz	30,0	50,0	_	dB
1570,01580,0 MHz	30,0	34,0	_	dB
1700,02400,0 MHz	30,0	34,0	_	dB
1800,01818,0 MHz	33,0	36,0	_	dB
4000,04400,0 MHz	15,0	20,0		dB



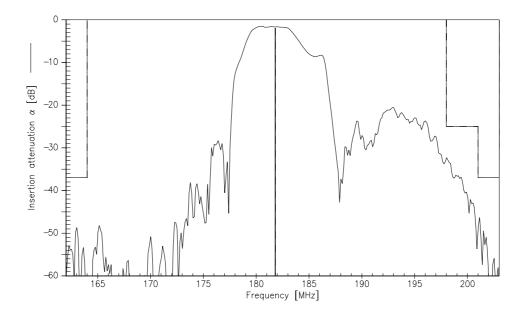
**Low-Loss Filter for Mobile Communication** 

181,80 MHz

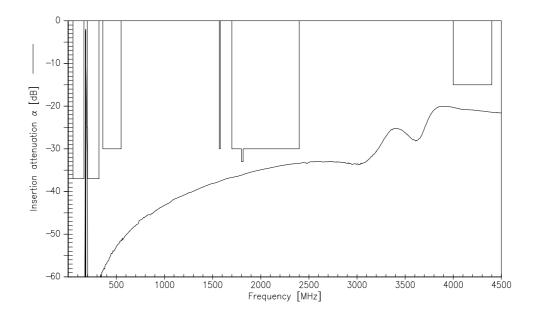
**Data Sheet** 



## Transfer function (narrowband):



## Transfer function (wideband):





B4944

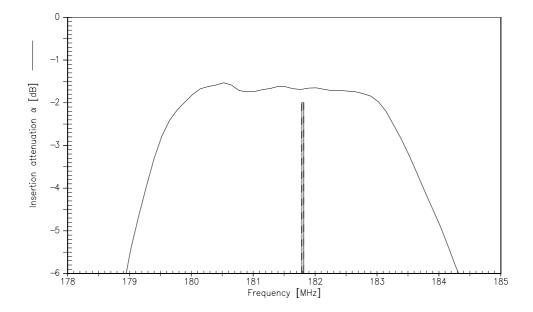
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## Transfer function (passband, scale +0,27 MHz):





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181,80 MHz

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This brochure replaces the previous edition.

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.