

# **SAW Filters for Mobile Communications**

Series/Type: B9014

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product		Deadline Last Orders	Last Shipments
B39192B9014E910	B39192B9640F210	2008-09-05	2009-01-31	2009-04-30

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.



### SAW Components

### **Low-Loss Filter for Mobile Communication**

1880,0 MHz

B9014

**Datasheet** 



### **Features**

- Low-loss RF filter for mobile telephone PCS systems, transmit path
- High selectivity
- Usable passband 60 MHz
- Unbalanced to unbalanced operation
- No external matching required
- Package for Surface Mounted Technology (SMT)

# bottom view 4 3 0,55 See Side view

Chip Sized SAW Package DCS4G

## Terminals

■ Gold-plated Ni

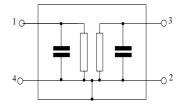
Dimensions in mm, approx weight 0,007g

top view

### Pin configuration

1 Input 3 Output

2, 4 To be grounded



Туре	Ordering code	Marking and Package according to	Packing according to
B9014	B39192-B9014-E910	C61157-A7-A105	F61074-V8152-Z000

Electrostatic Sensitive Device (ESD)

### **Maximum ratings**

Operable temperature range	Т	- 30 /+ 85	°C	
Storage temperature range	$T_{\rm stg}$	<b>- 40 /+ 85</b>	°C	
Input Power max.	$P_{IN}^{IS}$	15	dBm	source impedance 50 $\Omega$
DC voltage	$V_{DC}$	5	V	
ESD voltage	$V_{ESD}^{}^{*}$	50*	V	machine model, 10 pulses

<sup>\*</sup> acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses



### SAW Components

B9014

### **Low-Loss Filter for Mobile Communication**

1880,0 MHz

**Datasheet** 

Characteristics

Operating Temperature Range:  $T=25\pm2^{\circ}\mathrm{C}$  Terminating source impedance:  $Z_{\mathrm{S}}=50~\Omega$  Terminating load impedance:  $Z_{\mathrm{L}}=50~\Omega$ 

		min.	typ.	max.	
Center frequency	f <sub>C</sub>	_	1880,0	_	MHz
Maximum insertion attenuation	$\alpha_{\sf max}$				
1850,0 1910,0MHz		_	2,3	2,9	dB
Amplitude ripple (p-p)	$\Delta \alpha$				
1850,0 1910,0MHz		_	0,9	1,5	dB
Attenuation	α				
DC 1550,0MHz		32	34	_	dB
1550,0 1580,0MHz		35	39	_	dB
1580,0 1770,0MHz		30	35	_	dB
1770,0 1830,0MHz		21	24		dB
1930,0 1990,0MHz		35	45 <sup>1)</sup>	_	dB
1990,0 2032,0MHz		35	41	_	dB
2032,0 2500,0MHz		35	42	_	dB
2500,0 3820,0MHz		25	28	_	dB
3820,0 6000,0MHz		15	19	_	dB
Input return loss					
1850,0 1910,0MHz		8	10	_	dB
Output return loss					
1850,0 1910,0MHz		8	10	_	dB

<sup>1)</sup> Valid for frequencies from 1935 MHz to 1990 MHz



**SAW Components** 

B9014

**Low-Loss Filter for Mobile Communication** 

1880,0 MHz

**Datasheet** 

**Characteristics** 

Operating Temperature Range:  $T = -30 \text{ to } +85^{\circ}\text{C}$ 

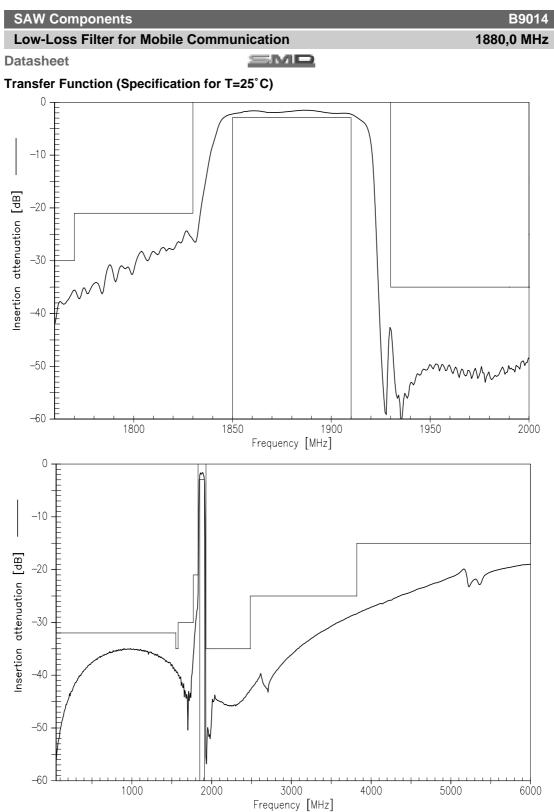
Terminating source impedance:  $Z_{\rm S} = 50~\Omega$ Terminating load impedance:  $Z_{\rm L} = 50~\Omega$ 

		min.	typ.	max.	
Center frequency	$f_{\mathbb{C}}$	_	1880,0	_	MHz
Maximum insertion attenuation	$\alpha_{\sf max}$				
1850,625 1909,375MHz		_	3,3 1)	3,9 1)	dB
Amplitude ripple (p-p)	Δα				
1850,625 1909,375MHz		_	2,0	2,5	dB
Attenuation	α				
DC 1550,0MHz		32	34	_	dB
1550,0 1580,0MHz		35	39	_	dB
1580,0 1770,0MHz		30	35	_	dB
1770,0 1830,0MHz		14	20	_	dB
1930,625 1989,375MHz		32	45 <sup>2)</sup>	_	dB
1990,0 2032,0MHz		35	41	_	dB
2032,0 2500,0MHz		35	42	_	dB
2500,0 3820,0MHz		25	28	_	dB
3820,0 6000,0MHz		15	19	_	dB
Input return loss					
1850,625 1909,375MHz		7	10	_	dB
Output return loss					
1850,625 1909,375MHz		7	10	_	dB

<sup>1)</sup> Valid in temperature range -30°C to +75°C. Guaranteed for +85°C: 4,2dB

<sup>&</sup>lt;sup>2)</sup> Valid for frequencies from 1935 MHz to 1990 MHz







SAW Components B9014

**Low-Loss Filter for Mobile Communication** 

1880,0 MHz

**Datasheet** 



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

© EPCOS AG 2004. All Rights Reserved. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

The information contained in this brochure describes the type of component and shall not be considered as guaranteed characteristics. Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

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.