



## Tx IF Filters for Cellular Phones

**Series/Type:**        **B4911**

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39161B4911Z810		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](http://www.epcos.com/sales).



## Withdrawn Products

The following products presented in this data sheet are being withdrawn:

B39161B4911Z810

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](http://www.epcos.com/sales).



# SAW Components

Datasheet B4911

Data Sheet



Datasheet



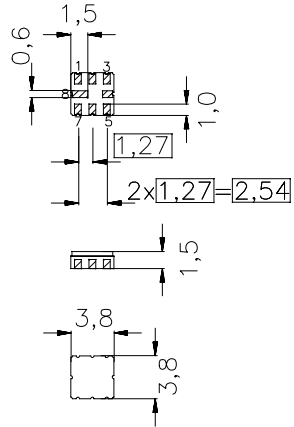
Ceramic package **QCC8B**

**Features**

- Low-loss Tx filter
- Hermetically sealed ceramic SMD package

**Terminals**

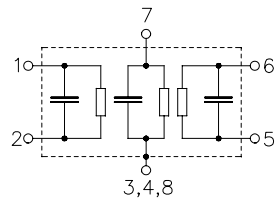
- Ni, gold-plated



Dimensions in mm, approx. weight 0,8 g

**Pin configuration**

- |       |                                  |
|-------|----------------------------------|
| 1     | Input                            |
| 2     | Input ground or balanced input   |
| 3     | To Be Grounded                   |
| 4,7,8 | To Be Grounded                   |
| 5     | Output                           |
| 6     | Output ground or balanced output |



Type	Ordering code	Marking and Package according to	Packing according to
B4911	B39161-B4911-Z810	C61157-A7-A46	F61074-V8037-Z000

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

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



### Characteristics

Operating temperature range:	$T = -30\text{ °C} \dots +85\text{ °C}$
Terminating source impedance:	$Z_S = 200\ \Omega \parallel 2300\text{ nH}$
Terminating load impedance:	$Z_L = 230\ \Omega \parallel 870\text{ nH}$

		min.	typ.	max.	
<b>Center frequency</b>	$f_c$	—	155,52	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$	—	3,0	5,0	dB
	155,505 ... 155,535 MHz				
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$	—	0,4	1,0	dB
	155,505 ... 155,535 MHz				
<b>Group delay</b>	$\Delta\tau$	—	200	500	ns
	155,505 ... 155,535 MHz				
<b>Input/output return loss</b>		10	15	—	dB
	155,505 ... 155,535 MHz				
<b>Attenuation</b>	$\alpha$				dB
	0,0 ... 135,52 MHz	40	50	—	
	175,52 ... 500,0 MHz	40	46	—	dB



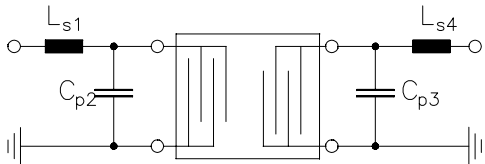
Matching Network to 50Ω

$$L_{s1} = 82 \text{ nH}$$

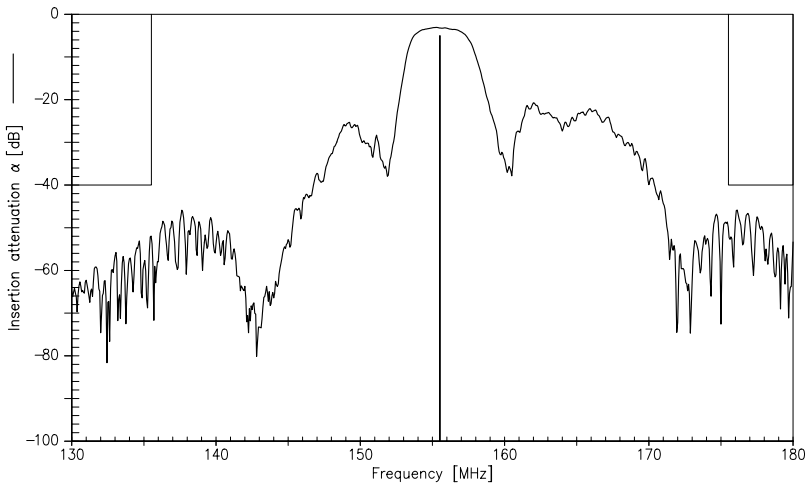
$$C_{p2} = 6,8 \text{ pF}$$

$$C_{p3} = 5,6 \text{ pF}$$

$$L_{s4} = 120 \text{ nH}$$



Frequency response



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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.