

# SAW filters for infrastructure systems

Series/Type: B3849

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product		Deadline Last Orders	Last Shipments
B39361B3849U310	B39361B5215H810	2009-09-25	2009-12-31	2010-03-31

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 B3849
Low-Loss Filter 357,1 MHz

**Data Sheet** 

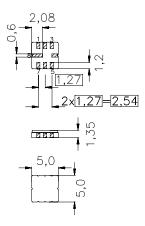
#### Ceramic package QCC8C

#### **Features**

- Low-loss IF filter for UMTS base stations
- 20 MHz usable bandwidth
- Constant group delay
- Ceramic SMD package

#### **Terminals**

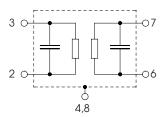
■ Gold plated



Dimensions in mm, approx. weight 0,1 g

## Pin configuration

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



Туре	Ordering code	Marking and Package according to	Packing according to
B3849	B39361-B3849-U310	C61157-A7-A56	F61074-V8169-Z000

Electrostatic Sensitive Device (ESD)

#### **Maximum ratings**

Operable temperature range	T	-40 / +85	°C
Storage temperature range	$T_{\rm stg}$	-40 / <del>+</del> 85	°C
DC voltage	$V_{\rm DC}$	0	V
Source power	$P_{s}$	10	dBm



SAW Components B3849 357,1 MHz **Low-Loss Filter** 

**Data Sheet** 

## Characteristics

T = -35 ... 85 °COperating temperature range:

 $Z_{\rm S}$  = 50  $\Omega$  and matching network  $Z_{\rm S}$  = 50  $\Omega$  and matching network 200 kHz Terminating source impedance: Terminating source impedance:

Group delay aperture:

		min.	typ.	max.	
Nominal frequency		_	357,1	_	MHz
Minimum insertion attenuation	$\alpha_{\text{min}}$	_	9,7	11,0	dB
<b>Amplitude ripple</b> (p-p) 347,1 367,1 MHz	Δα	_	0,6	1,0	dB
Pass bandwidth $\alpha_{rel} \ \leq 1, 0 \ dB$	B <sub>1,0dB</sub>	_	32	_	MHz
Relative attenuation (relative to $\alpha_{min}$ ) $1,0 \ \dots \ 332,1 \ MHz$ $382,1 \ \dots 1000,0 \ MHz$		35 35	50 42	_ _	dB dB
Group delay ripple (p-p) 347,1 367,1 MHz	Δτ	_	25	70	ns
Absolute group delay		_	0,5	0,6	μs
<b>1 dB compression</b> 347,1 367,1 MHz		12	_	_	dBm
Input IP3 347,1 367,1 MHz		32	_	_	dBm
Temperature coefficient of frequency		_	<b>- 87</b>	_	ppm/K

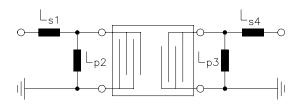


SAW Components	B3849
Low-Loss Filter	357,1 MHz

**Data Sheet** 

Matching network (element values may depend on pcb layout)

# 50 $\Omega$ unbalanced:



 $L_{s1} = 47 \text{ nH}$   $L_{p2} = 47 \text{ nH}$  $L_{p3} = 39 \text{ nH}$ 

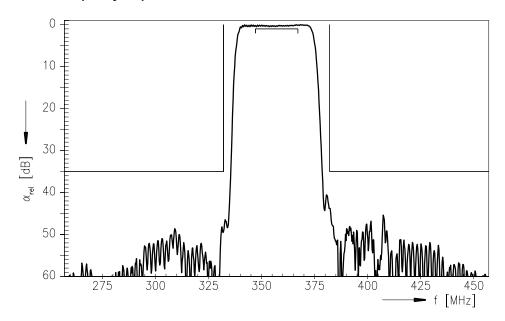
 $L_{s4} = 39 \text{ nH}$ 



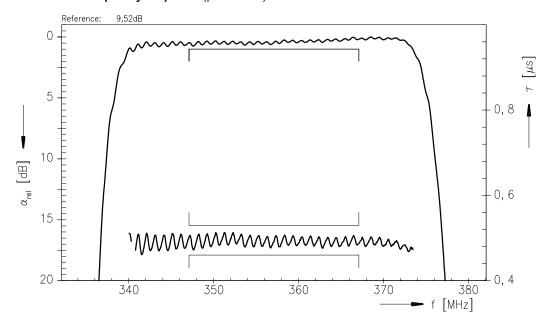
SAW Components B3849
Low-Loss Filter 357,1 MHz

**Data Sheet** 

# Normalized frequency response



## Normalized frequency response (pass band)





SAW Components B3849
Low-Loss Filter 357,1 MHz

**Data Sheet** 

#### Published by EPCOS AG Surface Acoustic Wave Components Division, SAW MC IS P.O. Box 80 17 09, 81617 Munich, GERMANY

© EPCOS AG 2002. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

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.