

SAW filters for infrastructure systems

Series/Type: B3849

The following products presented in this data sheet are being withdrawn.

| Ordering Code | Substitute Product | Date of Withdrawal | 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.



Data Sheet

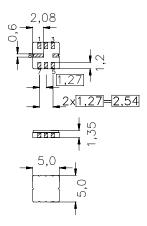
Ceramic package QCC8C

Features

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

Terminals

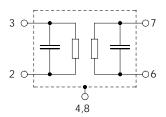
■ Gold plated



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 / +85 | °C |
| DC voltage | $V_{\rm DC}$ | 0 | V |
| Source power | $P_{\rm s}$ | 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:

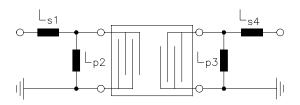
| | | min. | typ. | max. | |
|--|--------------------|----------|----------|--------|----------|
| Nominal frequency | f_{N} | _ | 357,1 | _ | MHz |
| Minimum insertion attenuation | | _ | 9,7 | 11,0 | dB |
| Amplitude ripple (p-p) 347,1 367,1 MHz | Δα | _ | 0,6 | 1,0 | dB |
| Pass bandwidth $\alpha_{rel} \ \leq 1, 0 \ dB$ | B _{1,0dB} | _ | 32 | _ | MHz |
| Relative attenuation (relative to α_{min}) 1,0 332,1 MHz 382,11000,0 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 |
| 1 dB compression 347,1 367,1 MHz | | 12 | _ | _ | dBm |
| Input IP3 347,1 367,1 MHz | | 32 | _ | _ | dBm |
| Temperature coefficient of frequency | | _ | - 87 | _ | ppm/K |



Data Sheet

Matching network (element values may depend on pcb layout)

50 Ω unbalanced:



 $L_{s1} = 47 \text{ nH}$

 $L_{p2} = 47 \text{ nH}$

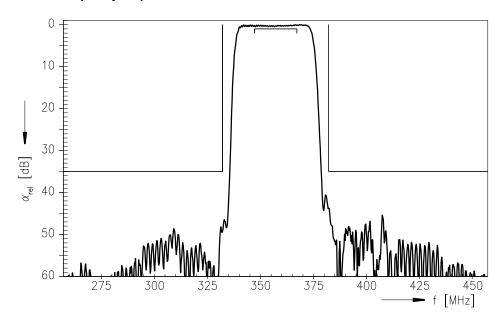
 $L_{p3} = 39 \text{ nH}$

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

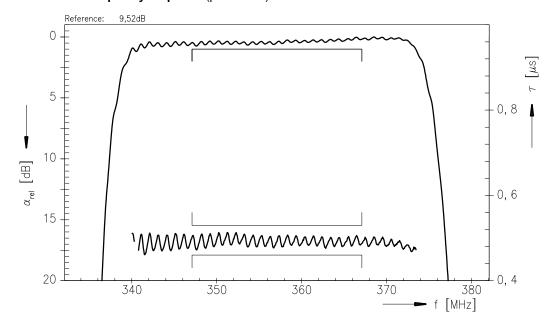


Data Sheet

Normalized frequency response



Normalized frequency response (pass band)





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.