



SAW filters for infrastructure systems

Series/Type: **B3892**

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39251B3892H510		2012-01-13	2012-12-31	2013-03-30

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

B3892

Low-Loss Filter

248,6 MHz

Data Sheet

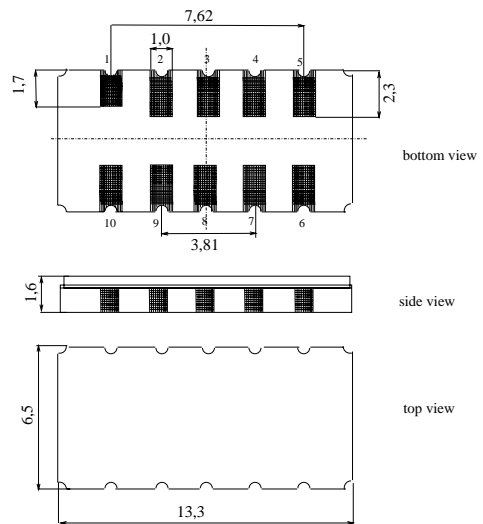
Ceramic package DCC12A

Features

- Low-loss IF filter for GSM-EDGE base station
- Temperature stable
- Balanced or unbalanced operation possible
- Ceramic SMD package

Terminals

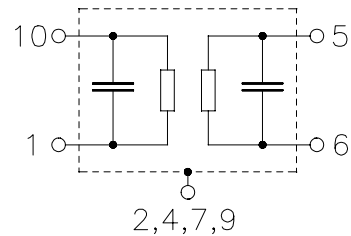
- Gold plated



Dimensions in mm, approx. weight 0,4 g

Pin configuration

- | | |
|------------|---------------|
| 1 | Input |
| 10 | Input ground |
| 6 | Output |
| 5 | Output ground |
| 3, 8 | Ground |
| 2, 4, 7, 9 | Case ground |



Type	Ordering code	Marking and Package according to	Packing according to
B3892	B39251-B3892-H510	C61157-A7-A94	F61074-V8163-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	-30 / +80	°C	
Storage temperature range	T_{stg}	-40 / +85	°C	
DC voltage	V_{DC}	0	V	
Source power	P_s	10	dBm	
Source power	P_s	20	dBm	$t \leq 100$ hours



SAW Components

B3892

Low-Loss Filter

248,6 MHz

Data Sheet

Characteristics

Operating temperature: $T = -5\text{ °C to }75\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$ and matching network
 Terminating load impedance: $Z_L = 50\ \Omega$ and matching network

		min.	typ.	max.	
Nominal frequency	f_N	—	248,6	—	MHz
Minimum insertion attenuation (including losses in matching network)	α_{\min}	—	4,7	6,0	dB
Passband width					
	$\alpha_{\text{rel}} \leq 3,0\text{ dB}$	$B_{3,0\text{dB}}$	—	430	— kHz
Amplitude ripple (p-p)					
		$\Delta\alpha$			
	$f_N \pm 100,0\text{ kHz}$	—	0,5	1,0	dB
Group delay ripple (p-p)					
		$\Delta\tau$			
	$f_N \pm 100,0\text{ kHz}$	—	0,6	0,7	μs
Relative attenuation (relative to α_{\min})					
	α_{rel}				
	$f_N \pm 0,33\text{ MHz} \dots f_N \pm 0,60\text{ MHz}$	12	15	—	dB
	$f_N \pm 0,60\text{ MHz} \dots f_N \pm 0,80\text{ MHz}$	25	37	—	dB
	$f_N \pm 0,80\text{ MHz} \dots f_N \pm 1,60\text{ MHz}$	45	50	—	dB
	$10,0\text{ MHz} \dots f_N - 29,20\text{ MHz}$	55	70	—	dB
	$f_N - 29,20\text{ MHz} \dots f_N - 1,60\text{ MHz}$	48	55	—	dB
	$f_N + 1,60\text{ MHz} \dots f_N + 100,0\text{ MHz}$	48	60	—	dB
	@ $f_N + 22,80\text{ MHz}$	55	60	—	dB
	@ $f_N + 52,00\text{ MHz}$	55	65	—	dB
	@ $f_N + 74,80\text{ MHz}$	55	65	—	dB
	@ $f_N + 104,0\text{ MHz}$	55	65	—	dB
	@ $f_N + 126,8\text{ MHz}$	55	65	—	dB
Temperature coefficient of frequency ¹⁾	TC_f	—	-0,036	—	ppm/K ²
Frequency inversion point	T_0	—	35	—	°C

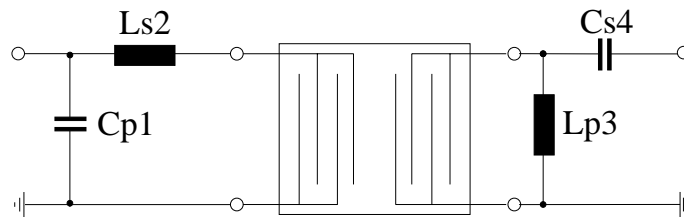
¹⁾ Temperature dependence of f_c : $f_c(T) = f_c(T_0)(1 + TC_f(T - T_0)^2)$



Data Sheet

Matching network to 50Ω

(Element values depend upon PCB layout)



$$C_{p1} = 16 \text{ pF}$$

$$L_{s2} = 39 \text{ nH}$$

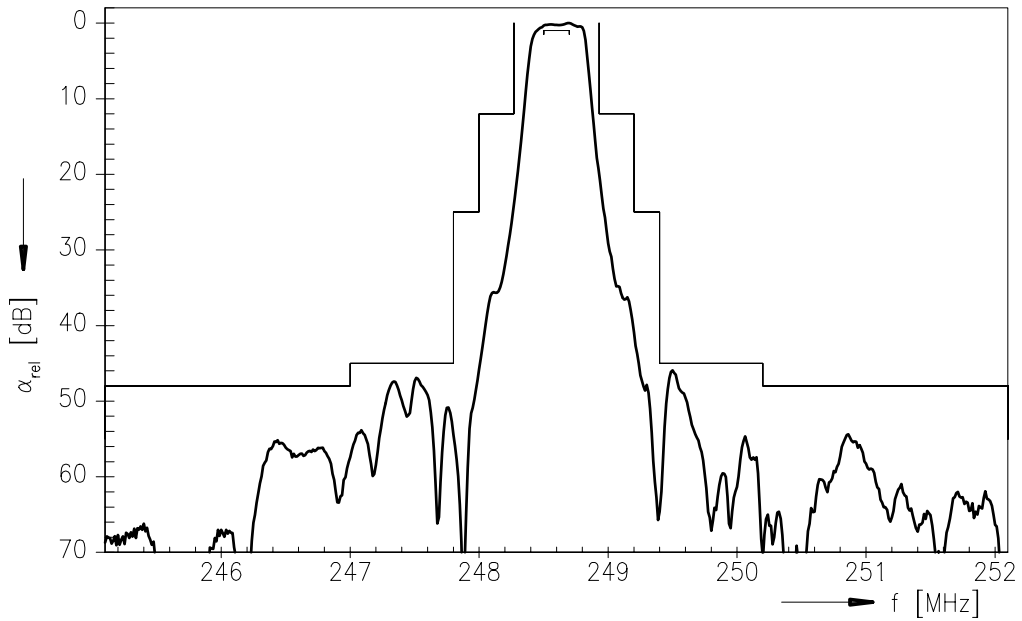
$$L_{p3} = 15 \text{ nH}$$

$$C_{s4} = 15 \text{ pF}$$

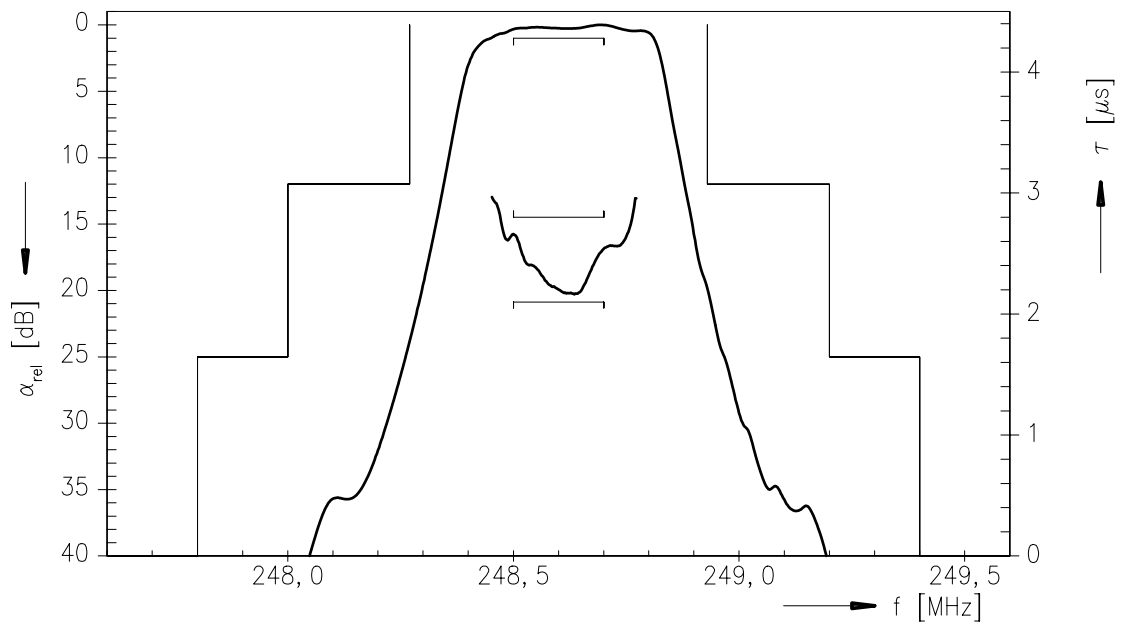


Data Sheet

Normalized transfer function:



Normalized transfer function (pass band):





SAW Components

B3892

Low-Loss Filter

248,6 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 2004. 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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Qualcomm RF360:](#)

[B39251B3892H510](#)