



SAW Filters for Infrastructure Systems

Series/Type: B3897

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39700B3897Z510		2011-07-15	2011-12-31	2012-03-31

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

B3897

Low-Loss Filter

70,00 MHz

Data Sheet

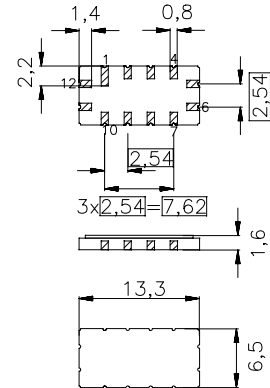
Ceramic package **QCC12**

Features

- IF low-loss filter
- 2,85 MHz usable bandwidth
- Ceramic SMD package

Terminals

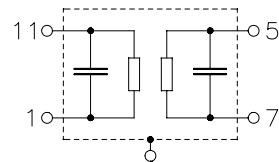
- Gold plated



Dim. in mm, approx. weight 0,44 g

Pin configuration

- | | |
|--------------|-----------------------------|
| 11 | Input (balanced) |
| 1 | Input (balanced or ground) |
| 5 | Output (balanced) |
| 7 | Output (balanced or ground) |
| 2, 3, 8, 9 | Case - ground |
| 4, 6, 10, 12 | To be grounded |



Type	Ordering code	Marking and Package according to	Packing according to
B3897	B39700-B3897-Z510	C61157-A7-A55	F61074-V8163-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 40/+ 85	°C
Storage temperature range	T_{stg}	- 40/+ 85	°C
DC voltage	V_{DC}	0	V
Source power	P_s	10	dBm



SAW Components

B3897

Low-Loss Filter

70,00 MHz

Data Sheet

Characteristics

Operating temperature range:

$T = -20 \text{ to } 80 \text{ }^{\circ}\text{C}$

Terminating source impedance:

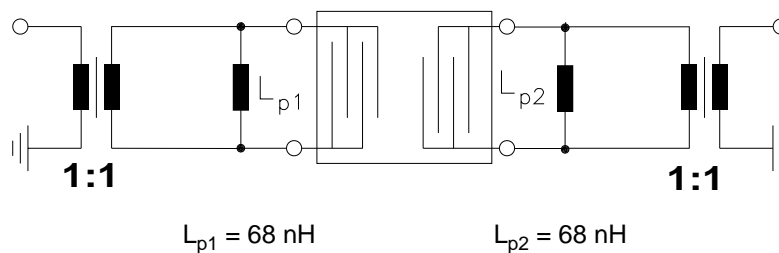
$Z_S = 50 \text{ } \Omega$ balanced and matching network

Terminating load impedance:

$Z_L = 50 \text{ } \Omega$ balanced and matching network

		min.	typ.	max.	
Nominal frequency	f_N	—	70,0	—	MHz
Insertion attenuation at f_N (including matching network)	α_N	—	6,3	8,0	dB
Passband width	$\alpha_{\text{rel}} \leq 3,0 \text{ dB}$				
	$B_{3,0\text{dB}}$	3,5	4,7	—	MHz
Amplitude ripple (p-p)	$\Delta\alpha$				
	$f_N \pm 1,425 \text{ MHz}$	—	0,5	1,0	dB
Phase ripple (p-p)	$\Delta\phi$				
	$f_N \pm 1,425 \text{ MHz}$	—	3,0	7,0	$^{\circ}$
Absolute group delay (@ f_N)	τ	—	1,47	—	μs
Group delay ripple (p-p)	$\Delta\tau$				
	$f_N \pm 1,425 \text{ MHz}$	—	110	175	ns
Relative attenuation (relative to α_N)	α_{rel}				
	$f_N - 3,875 \text{ MHz} \dots f_N - 20 \text{ MHz}$	40	45	—	dB
	$f_N + 3,875 \text{ MHz} \dots f_N + 20 \text{ MHz}$	37	40	—	dB
Temperature coefficient of frequency	TC_f	—	-87	—	ppm/K

Matching network (Element values depend upon PCB layout)





SAW Components

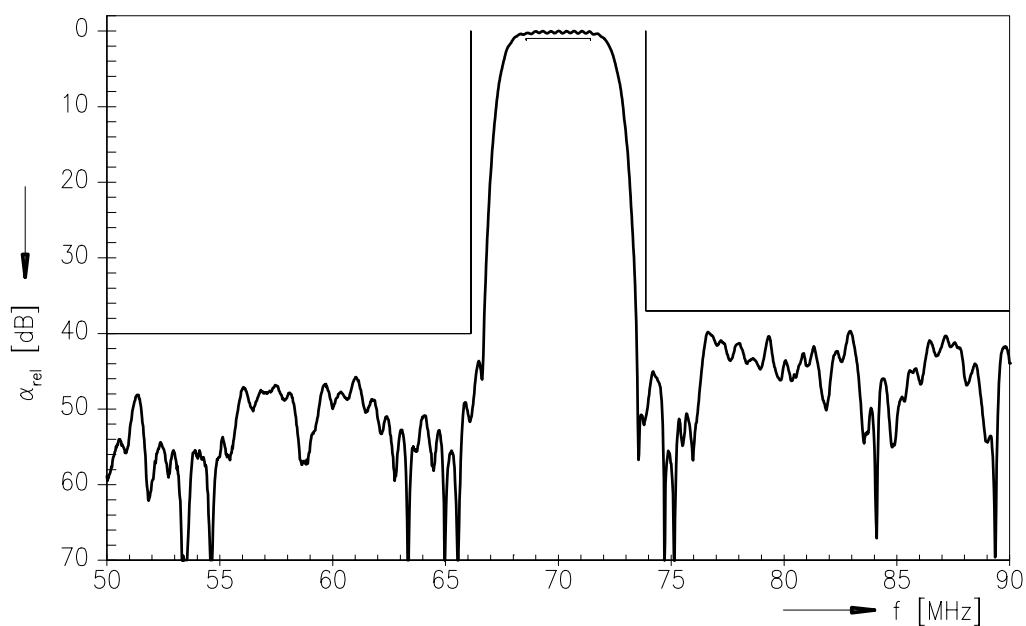
B3897

Low-Loss Filter

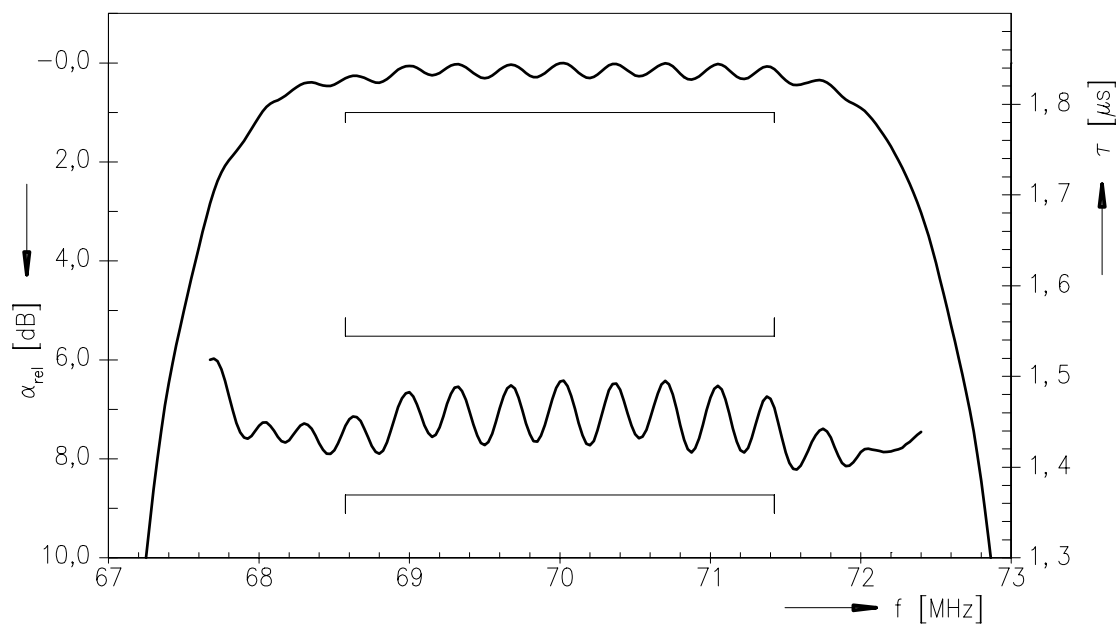
70,00 MHz

Data Sheet

Normalized frequency response



Normalized frequency response (pass band)





SAW Components

B3897

Low-Loss Filter

70,00 MHz

Data Sheet

Published by EPCOS AG

Surface Acoustic Wave Components Division, SAW MC

P.O. Box 80 17 09, 81617 Munich, GERMANY

© EPCOS AG 2003. 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:

EPCOS:

[B39700B3897Z510](#)