



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The following products presented in this data sheet are being withdrawn.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

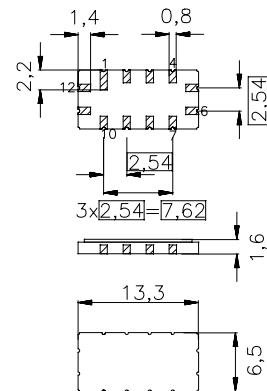
For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at [www.epcos.com/sales](http://www.epcos.com/sales).

**Features**

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

**Terminals**

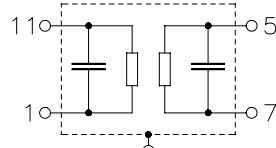
- Gold plated



Dim. in mm, aprox. 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	

**Data Sheet**
**Characteristics**

Operating temperature range:

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

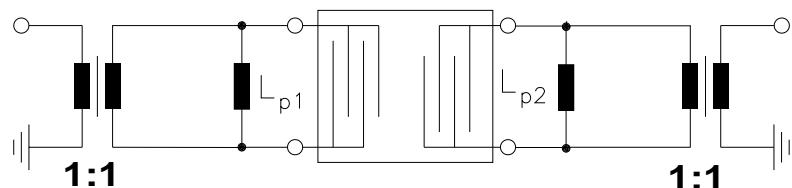
Terminating source impedance:

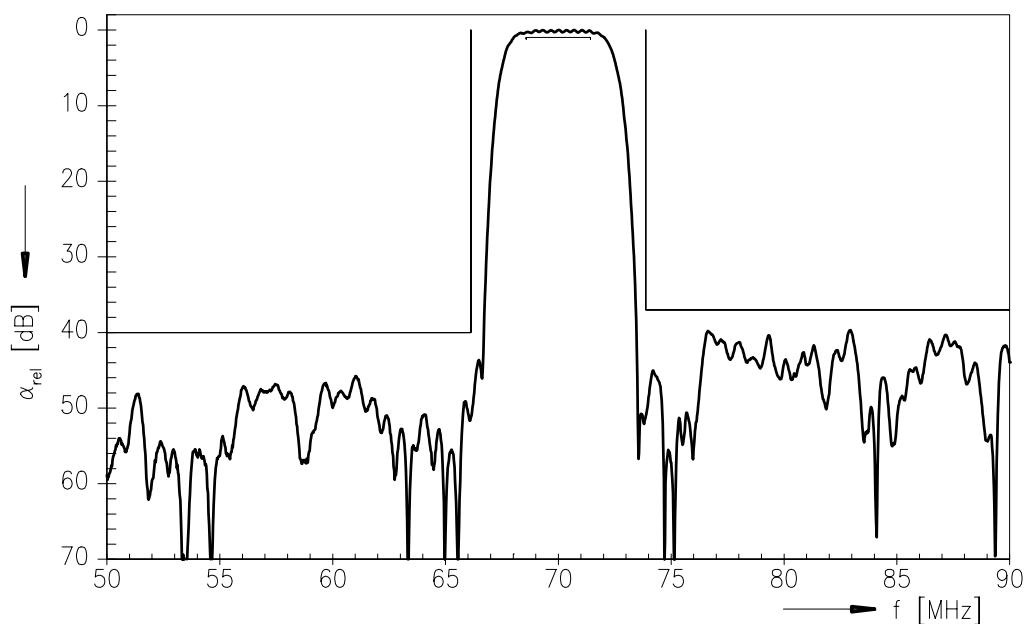
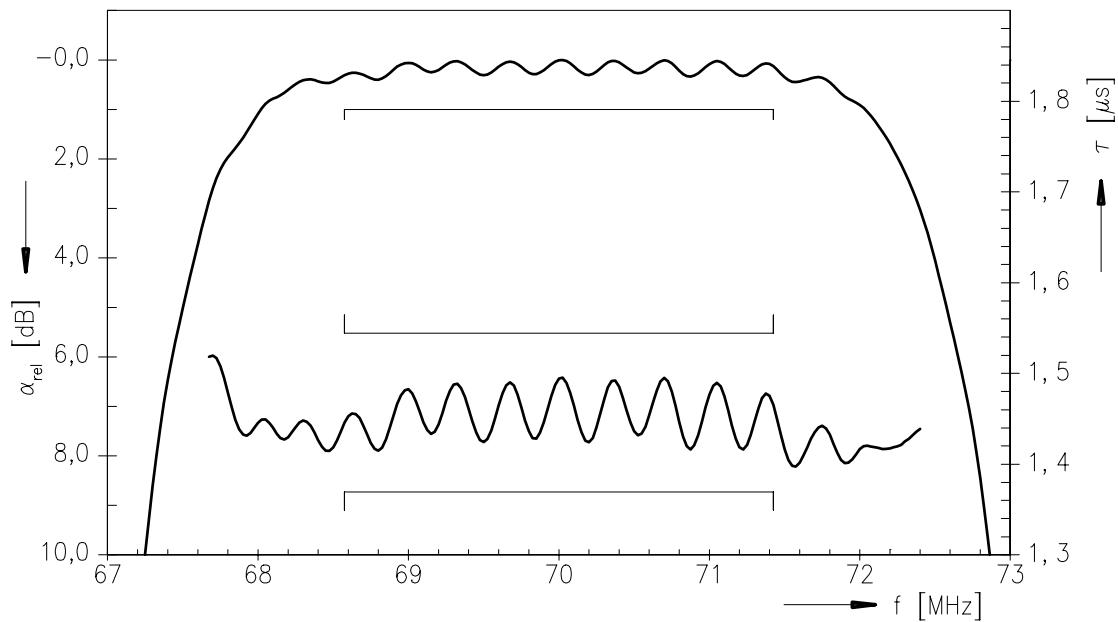
 $Z_S = 50 \text{ } \Omega$  balanced and matching network

Terminating load impedance:

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

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

**Matching network** (Element values depend upon PCB layout)

 $L_{p1} = 68 \text{ nH}$ 
 $L_{p2} = 68 \text{ nH}$

**Data Sheet**
**Normalized frequency response**

**Normalized frequency response (pass band)**




**SAW Components**

**B3897**

**Low-Loss Filter**

**70,00 MHz**

**Data Sheet**

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