



# *SAW Components*

*Data Sheet B7722*

Data Sheet

A large, stylized, 3D-rendered graphic of the EPCOS logo. The letters "EPCOS" are rendered in a white, glowing, sans-serif font, appearing to be part of a larger, curved structure that resembles a stylized globe or a series of overlapping planes. The background is dark and textured.



**SAW Components**

**B7722**

**Low-Loss Filter**

**1575,42 MHz**

**Data Sheet**

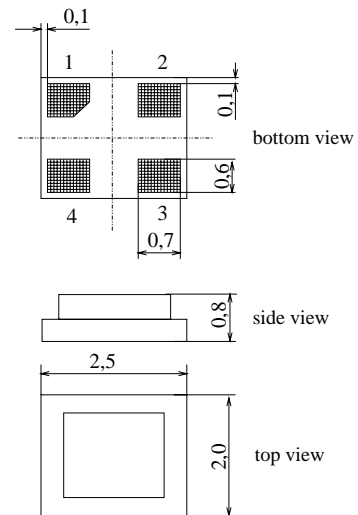
**Chip Sized SAW Package**

**Features**

- Low loss RF filter for GPS receivers
- Unbalanced to unbalanced operation
- Low amplitude ripple
- Package for **Surface Mounted Technology (SMT)**

**Terminals**

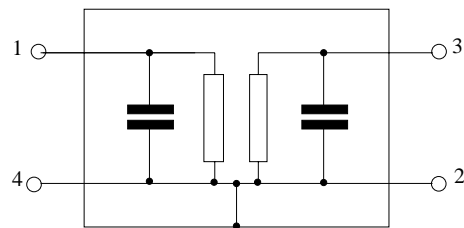
- Ni, gold-plated



Dimensions in mm, approx. weight 0,01 g

**Pin configuration**

- 1 Input
- 3 Output
- 2,4 Ground



Type	Ordering code	Marking and Package according to	Packing according to
B7722	B39162-B7722-C510	C61157-A7-A80	F61074-V8111-Z000

**Electrostatic Sensitive Device (ESD)**

**Maximum ratings**

Operable temperature range	$T$	- 40/+ 85	°C	source and load impedance 50 $\Omega$ continuous wave signal
Storage temperature range	$T_{stg}$	- 40/+ 85	°C	
DC voltage	$V_{DC}$	3	V	
Input power max. 1573,42 ... 1577,42 MHz	$P_{IN}$	3	dBm	
50,0...1460 and 1710 ... 4000 MHz	$P_{IN}$	15	dBm	



**SAW Components**

**B7722**

**Low-Loss Filter**

**1575,42 MHz**

**Data Sheet**

**Characteristics**

Operating temperature range:  $T_A = -30 \dots +85 \text{ }^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 50 \text{ } \Omega \text{ unbal.}$   
 Terminating load impedance:  $Z_L = 50 \text{ } \Omega \text{ unbal.}$

			min.	typ.	max.	
<b>Nominal frequency</b>	$f_N$		—	1575,42	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$					
		1573,42MHz ... 1577,42 MHz	—	1,5	2,1	dB
		1573,42MHz ... 1577,42MHz*)	—	1,5	1,8	dB
		1574,42MHz ... 1576,42MHz**)	—	1,4	1,8	dB
<b>Amplitude ripple in passband (p-p)</b>	$\Delta\alpha$					
		1573,42MHz ... 1577,42 MHz	—	0,1	0,5	dB
<b>Group delay</b>	$\tau$					
		1573,42 ... 1577,42 MHz	—	18	50	ns
<b>Bandwidth</b>	$\alpha_{\text{rel}} \leq 3 \text{ dB}$	$B_{3\text{dB}}$	10	38	—	MHz
<b>Attenuation</b>	$\alpha$					
		100,0MHz ... 824,0 MHz	35	42	—	dB
		824,0MHz ... 850,0 MHz	40	45	—	dB
		850,0MHz ... 1460,0 MHz	35	43	—	dB
		1648,0 MHz ... 1660,0 MHz	25	30	—	dB
		1660,0 MHz ... 1710,0 MHz	27	35	—	dB
		1710,0 MHz ... 1750,0 MHz	33	40	—	dB
		1750,0 MHz ... 1850,0 MHz	35	40	—	dB
		1850,0 MHz ... 1910,0 MHz	40	48	—	dB
		1910,0 MHz ... 2500,0 MHz	35	44	—	dB
		2500,0 MHz ... 3500,0 MHz	30	35	—	dB
<b>VSWR</b>						
		1573,42MHz ... 1577,42 MHz	—	1,4	1,8	

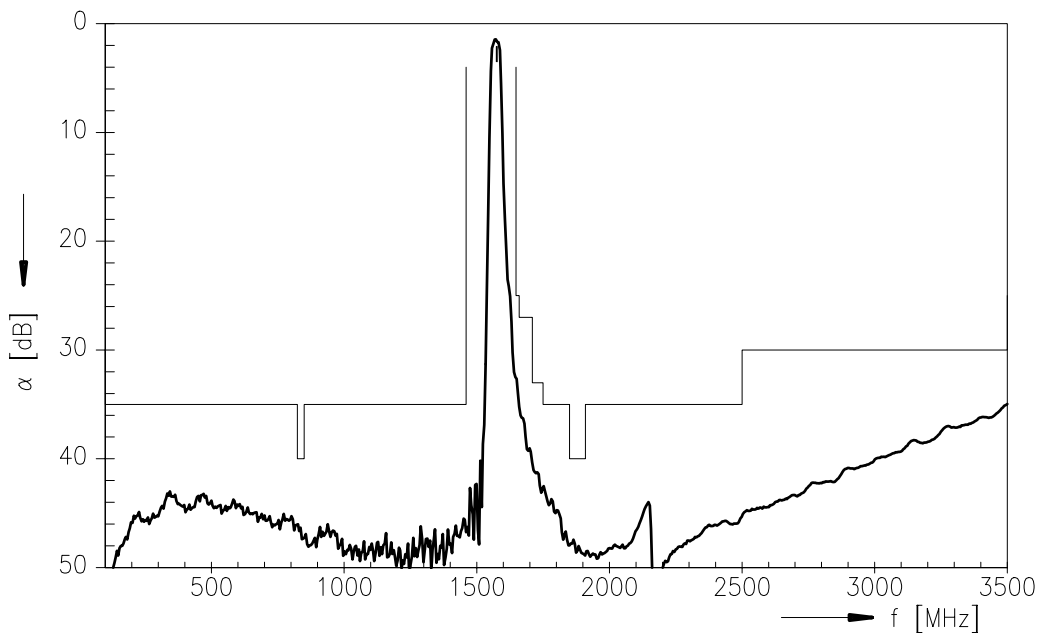
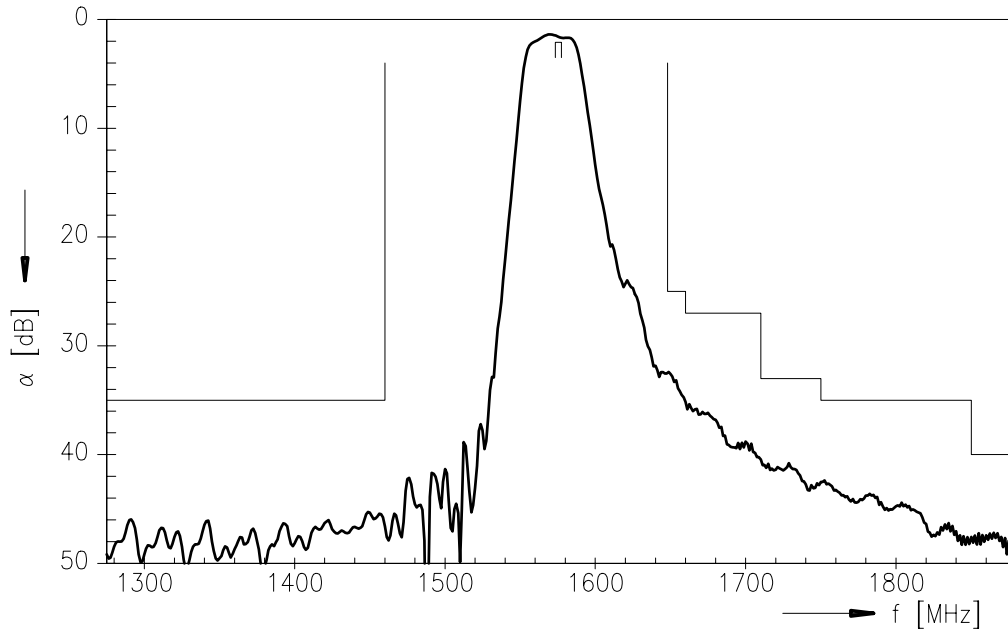
\*)  $T_A = 20 \text{ }^\circ\text{C}$

\*\*\*)  $T_A = -30 \dots +70 \text{ }^\circ\text{C}$



Data Sheet

Transfer function





**SAW Components**

**B7722**

**Low-Loss Filter**

**1575,42 MHz**

Data Sheet

**Published by EPCOS AG**

**SAW MC WT, P.O. Box 80 17 09, 81617 Munich, GERMANY**

**TEL ++49 89 636 09, FAX ++49 89 636 2 26 89**

© 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.