



# SAW Components

Data Sheet B7722, Pb-Free





**SAW Components**

**B7722**

**Low-Loss Filter**

**1575,42 MHz**

**Data Sheet**

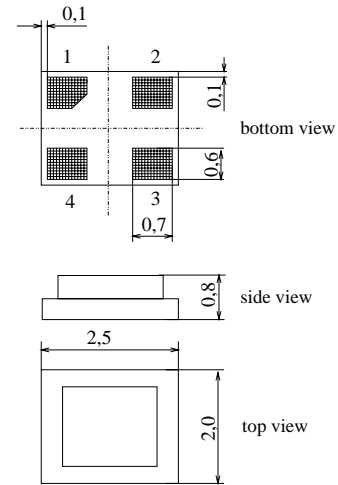
**Chip Sized SAW Package DCS4H**

**Features**

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

**Terminals**

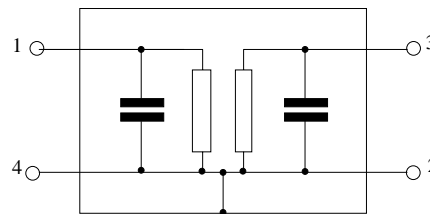
- Ni, gold-plated



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-K710	C61157-A7-A136	F61074-V8189-Z000

**Electrostatic Sensitive Device (ESD)**

**Maximum ratings**

Operable temperature range	$T$	- 40/+ 85	°C	Machine Model, 10 pulses source and load impedance 50 Ω continuous wave signal
Storage temperature range	$T_{stg}$	- 40/+ 85	°C	
DC voltage	$V_{DC}$	3	V	
ESD voltage	$V_{ESD}^*$	50*	V	
Input power max. 1573,42 ... 1577,42 MHz	$P_{IN}$	3	dBm	
50,0...1460 and 1710 ... 4000 MHz	$P_{IN}$	15	dBm	

\* - acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses


**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	

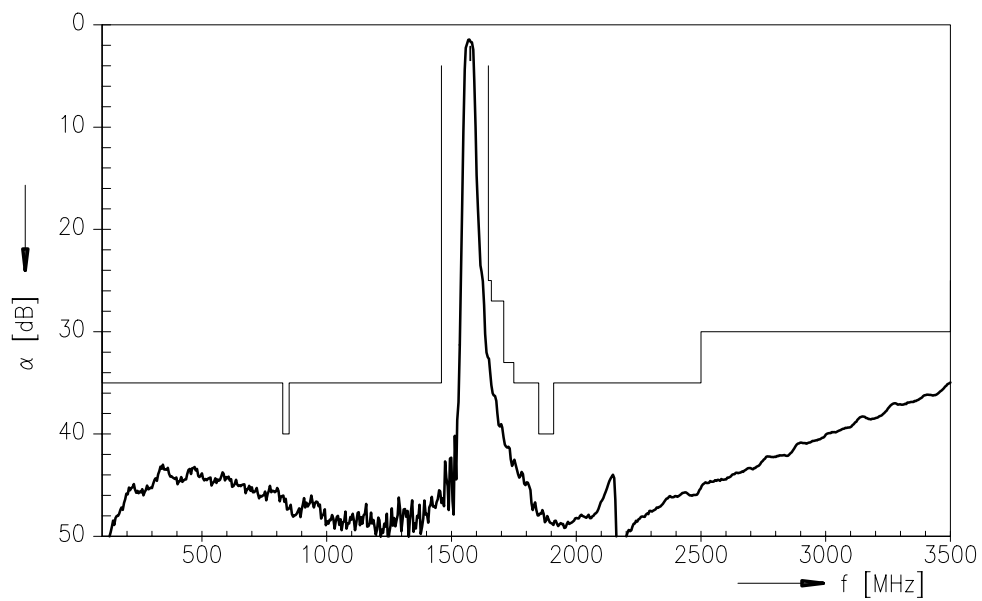
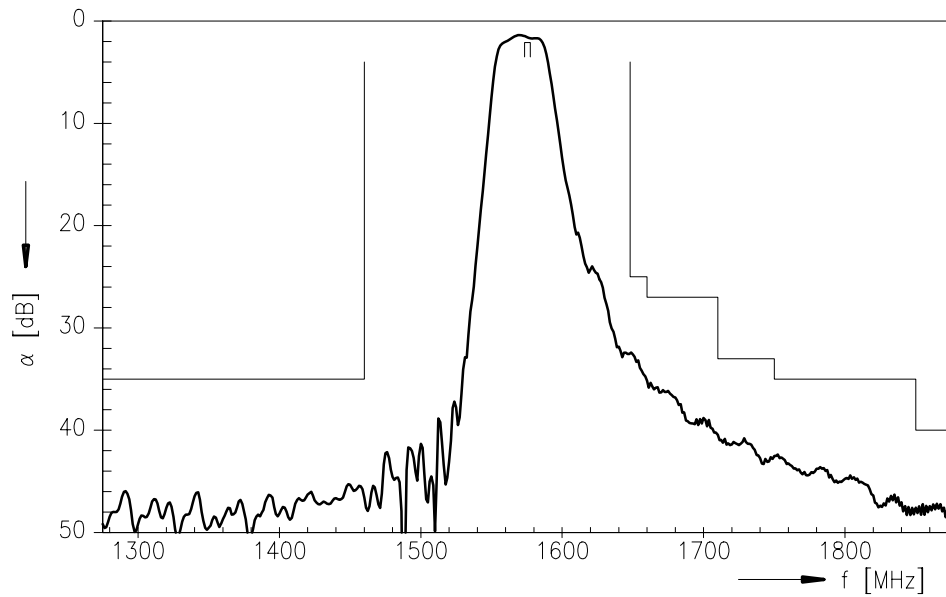
 \*)  $T_A = 20 \text{ }^\circ\text{C}$ 

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



Data Sheet

Transfer function





**SAW Components**

**B7722**

**Low-Loss Filter**

**1575,42 MHz**

Data Sheet

**Published by EPCOS AG**

**Surface Acoustic Wave Components Division, SAW MC PD**

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

© EPCOS AG 2005. 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.