



SAW Components

Data Sheet B7722, Pb-Free





SAW Components

B7722

Low-Loss Filter

1575,42 MHz

Data Sheet

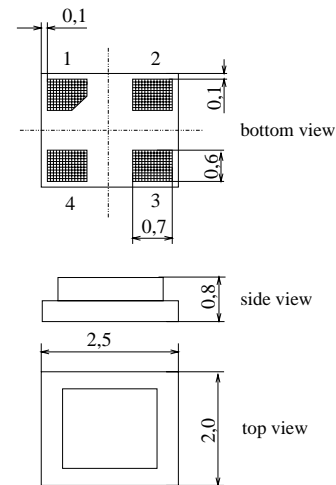
Chip Sized SAW Package DCS4H

Features

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

Terminals

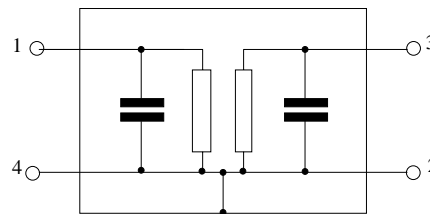
- Ni, gold-plated



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
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	source and load impedance 50 Ω continuous wave signal
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: $Z_S = 50 \text{ } \Omega$ unbal.
 Terminating load impedance: $Z_L = 50 \text{ } \Omega$ unbal.

			min.	typ.	max.	
Nominal frequency	f_N		—	1575,42	—	MHz
Maximum insertion attenuation	α_{\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
Amplitude ripple in passband (p-p)	$\Delta\alpha$					
1573,42MHz ... 1577,42 MHz			—	0,1	0,5	dB
Group delay	τ					
1573,42 ... 1577,42 MHz			—	18	50	ns
Bandwidth	$\alpha_{\text{rel}} \leq 3 \text{ dB}$	$B_{3\text{dB}}$	10	38	—	MHz
Attenuation		α				
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
VSWR						
1573,42MHz ... 1577,42 MHz			—	1,4	1,8	

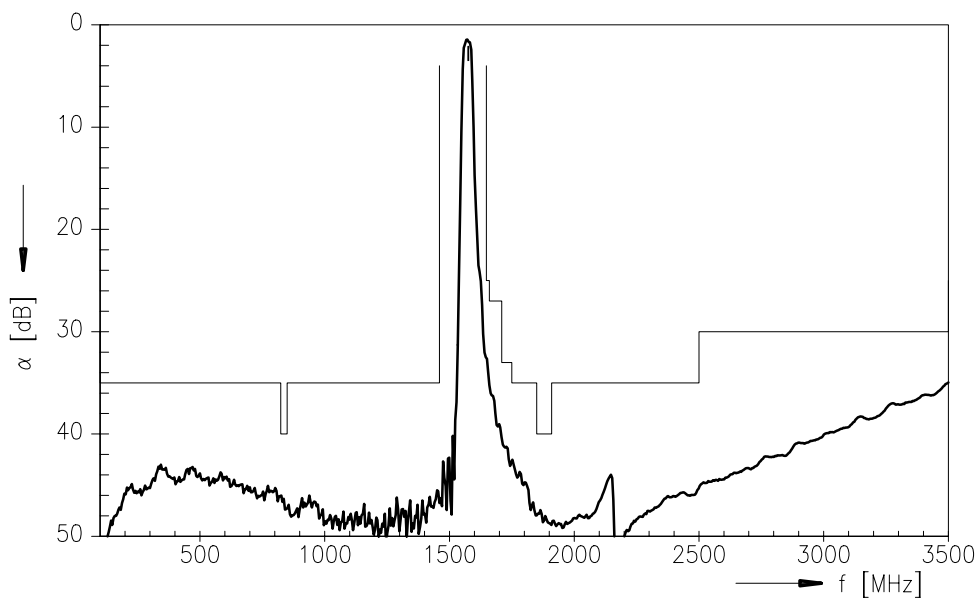
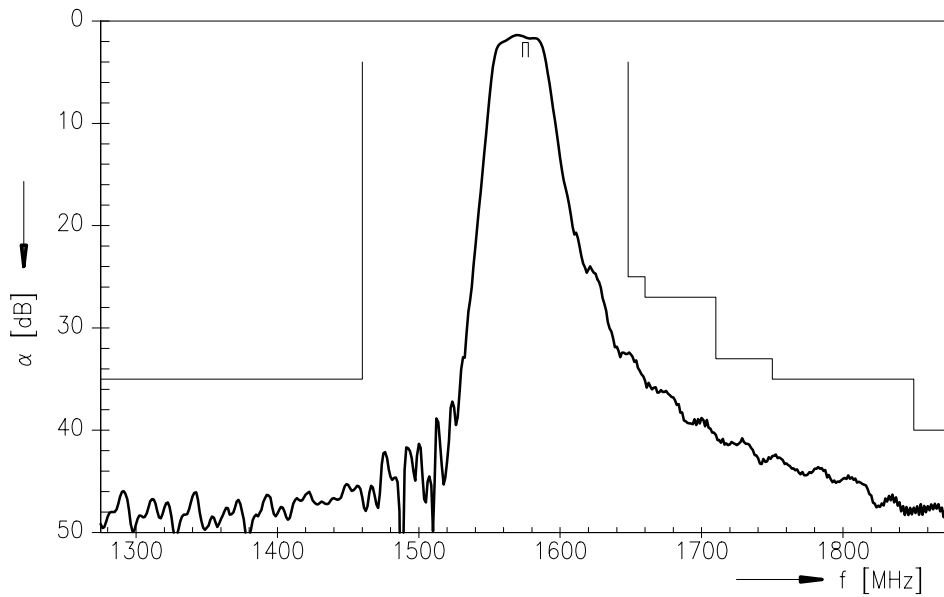
 *) $T_A = 20 \text{ }^\circ\text{C}$

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



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.