

# **SAW Components**

Data Sheet B7708, Pb-Free





SAW Components B7708

Low Loss Filter 1575,42 MHz

**Data Sheet** 



#### **Features**

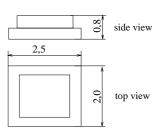
- Low loss RF filter for GPS receivers
- Usable passband 2,0 MHz
- Low amplitude ripple
- Package for Surface Mounted Technology (SMT)
- Pb-free

# 0,1 1 2 bottom view 4 3 0,7

**Chip Sized SAW Package DCS4H** 

#### **Terminals**

Ni, gold-plated

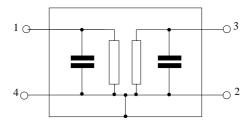


Dimensions in mm, approx. weight 0,01 g

# Pin configuration

1 Input, unbalanced3 Output, unbalanced

2, 4 To be grounded, Case Ground



Туре	Ordering code	Marking and Package according to	Packing according to	
B7708	B39162-B7708-K710	C61157-A7-A136	F61074-V8189-Z000	

Electrostatic Sensitive Device (ESD)

#### **Maximum ratings**

Operable temperature range	Τ	<b>- 40 / + 85</b>	°C		
Storage temperature range	$T_{ m stg}$	<b>- 40 / + 85</b>	°C		
DC voltage	$V_{\rm DC}$	5	V		
ESD voltage	$V^*_{ESD}$	50*	V		
Input power max.					
1574,3 1576,7 MHz	$P_{IN}$	3	dBm	source and load impedance 50 $\Omega$	
50,01535,5 and 1625,5 6000 MHz	$P_{IN}$	15	dBm	continuous wave signal	

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



SAW Components B7708

**Low Loss Filter** 1575,42 MHz

**Data Sheet** 



#### **Characteristics**

Operating temperature range:

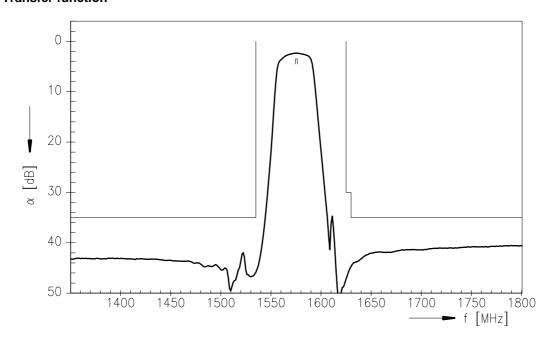
 $T = -40 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C}$   $Z_{\text{S}} = 50 \,\Omega$   $Z_{\text{L}} = 50 \,\Omega$ Terminating source impedance: Terminating load impedance:

	min.	typ.	max.	
Center frequency f <sub>C</sub>	_	1575,42		MHz
Maximum insertion attenuation α <sub>max</sub> 1574,221576,62 MHz	_	2,4	3,5	dB
Amplitude ripple (p-p) $$\Delta\alpha$$ 1574,221576,62 MHz	_	0,1	1,0	dB
Group delay $\tau \\ 1574,22 \dots 1576,62 \ \text{MHz}$	_	35	50	ns
Attenuation $\alpha$				
50,01535,0 MHz	35	42	_	dB
1625,01630,0 MHz	30	44	_	dB
1630,03500,0 MHz	35	40	_	dB
3500,04000,0 MHz	20	35	_	dB
4000,06000,0 MHz	10	20	_	dB
<b>Return loss</b> 1574,221576,62 MHz	11,0	19,0	_	dB
VSWR	,-			
1574,221576,62 MHz	_	1,25	1,8	

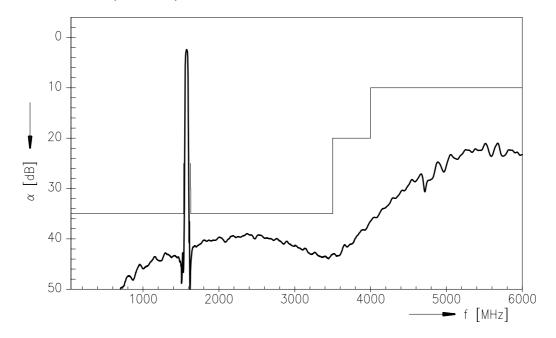


SAW Components	B7708
Low Loss Filter	1575,42 MHz
Data Sheet	

# **Transfer function**



# Transfer function (wide band)





SAW Components B7708

Low Loss Filter 1575,42 MHz

 $\equiv$ M $\square$ 

**Data Sheet** 

### Published by EPCOS AG Surface Acoustic Wave Components Division, SAW MC PD P.O. Box 80 17 09, D-81617 München

© EPCOS AG 2004. All Rights Reserved. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

The information contained in this brochure describes the type of component and shall not be considered as guaranteed characteristics. 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.