



SAW Components

Data Sheet B7722, Pb-Free





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B7722

Low-Loss Filter

1575,42 MHz

Data Sheet

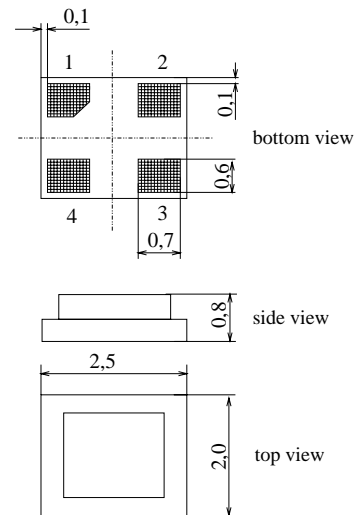
Features

- 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

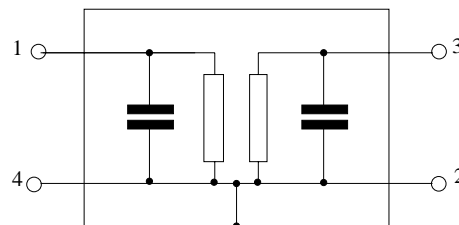
Chip Sized SAW Package DCS4H



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



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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.	
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	

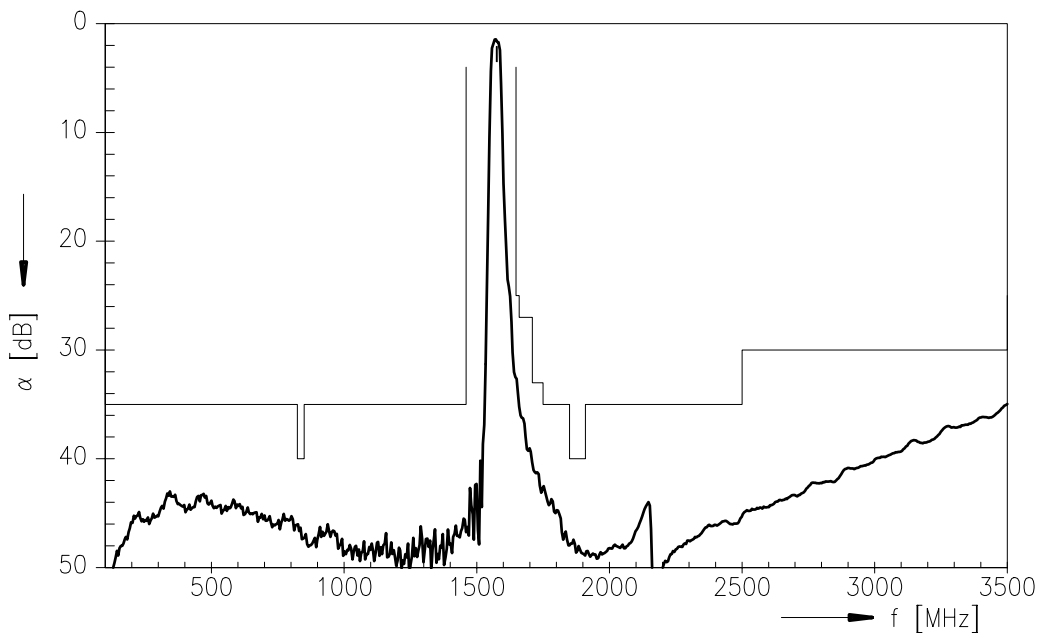
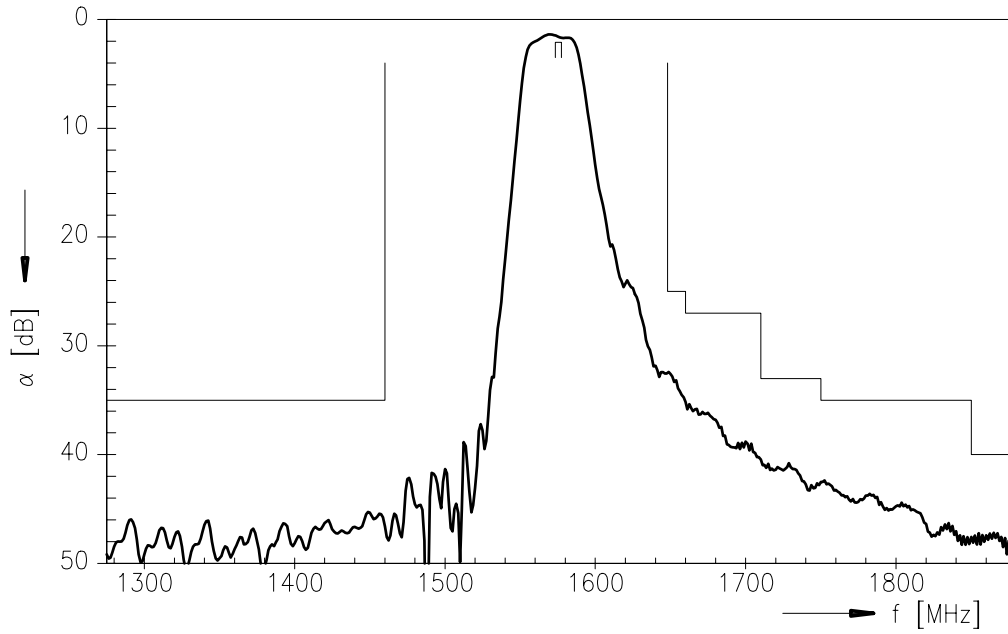
*) $T_A = 20 \text{ }^\circ\text{C}$

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



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Transfer function





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