



SAW Components

Data Sheet B7725, Pb-free





SAW Components

B7725

Low-Loss Filter

1575,42 MHz

Data Sheet

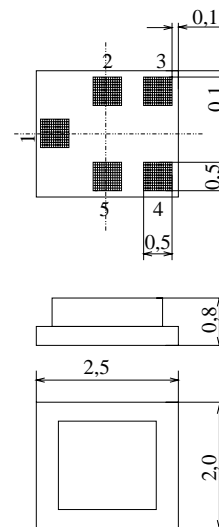
Chip Sized SAW Package QCS5H

Features

- Low loss RF filter for GPS receivers
- Unbalanced to balanced operation
- Low amplitude ripple
- Impedance transformation from 50 Ω to 100 Ω
- Package for **Surface Mounted Technology (SMT)**
- Pb-free

Terminals

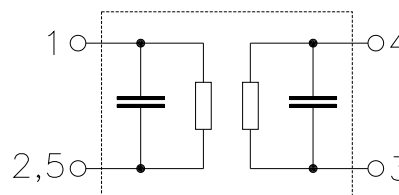
- Ni, gold-plated



Dimensions 2,0x2,5 mm², approx. weight 0,015 g

Pin configuration

- | | |
|------|-------------------|
| 1 | Input, unbalanced |
| 3, 4 | Output, balanced |
| 2, 5 | Case ground |



Type	Ordering code	Marking and Package according to	Packing according to
B7725	B39162-B7725-K910	C61157-A7-A139	F61074-V8189-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 40/+ 85	°C	machine model, 10 pulses source impedance 50 Ω, load impedance 100 Ω
Storage temperature range	T_{stg}	- 40/+ 85	°C	
DC voltage	V_{DC}	3	V	
ESD voltage	V_{ESD}^*	50*	V	
Source power	P_s	10	dBm	

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


SAW Components
B7725
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: $Z_L = 100 \text{ } \Omega$ bal.

		min.	typ.	max.	
Nominal frequency	f_N	—	1575,42	—	MHz
Maximum insertion attenuation	α_{\max}				
1574,42MHz ... 1576,42 MHz		—	1,3	1,8	dB
1574,42MHz ... 1576,42 MHz		—	1,3	1,7*)	dB
Amplitude ripple in passband (p-p)	$\Delta\alpha$				
1574,42MHz ... 1576,42 MHz		—	0,1	0,5	dB
Phase linearity deviation	$\Delta\phi$				
1574,42MHz ... 1576,42 MHz		—	0,05	1,0	$^\circ$ rms
Output phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^\circ$)					
1574,42MHz ... 1576,42 MHz		-15	7	15	$^\circ$
Output amplitude balance (S_{31} / S_{21})					
1574,42MHz ... 1576,42 MHz		-1,5	0,2	1,5	dB
Relative attenuation (relative to att. at f_N)	α_{rel}				
100,0MHz ... 1475,0 MHz		40	48	—	dB
1475,0 MHz ... 1501,0 MHz		35	40	—	dB
1501,0 MHz ... 1525,0 MHz		20	28	—	dB
1625,0 MHz ... 1675,0 MHz		10	22	—	dB
1675,0 MHz ... 1750,0 MHz		30	35	—	dB
1750,0 MHz ... 1800,0 MHz		35	42	—	dB
1800,0 MHz ... 1980,0 MHz		40	48	—	dB
1980,0 MHz ... 2400,0 MHz		35	41	—	dB
2400,0 MHz ... 3155,0 MHz		40	50	—	dB
3155,0 MHz ... 6000,0 MHz		35	46	—	dB
824,0MHz ... 894,0 MHz		40	48	—	dB
1850,0 MHz ... 1910,0 MHz		40	50	—	dB
1920,0 MHz ... 1980,0 MHz		40	51	—	dB
VSWR					
1574,42MHz ... 1576,42 MHz		—	1,4	1,8	

 *) $T_A = +25 \text{ }^\circ\text{C}$



SAW Components

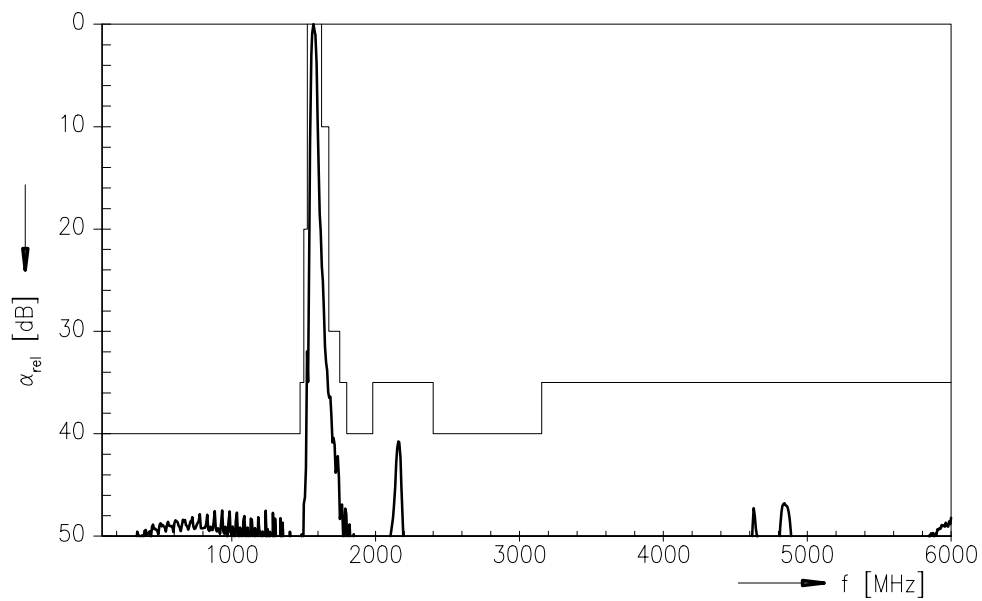
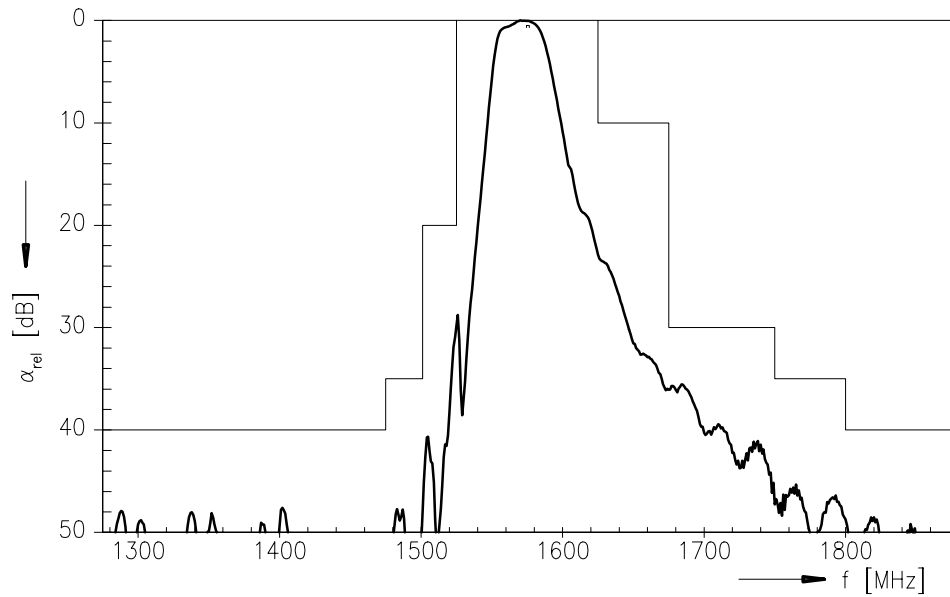
B7725

Low-Loss Filter

1575,42 MHz

Data Sheet

Transfer function





SAW Components

B7725

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.