



SAW Components

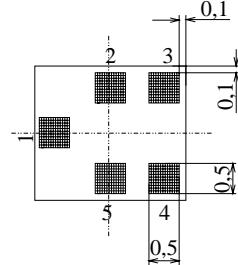
Data Sheet B7725

Data Sheet

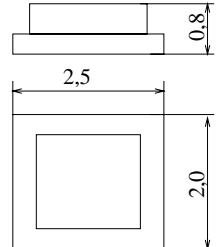


SAW Components
B7725
Low-Loss Filter
1575,42 MHz
Data Sheet
Chip Sized SAW Package
Features

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

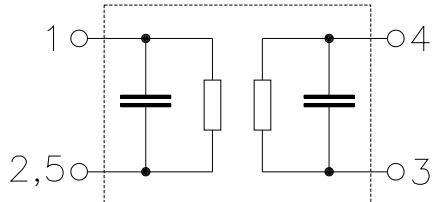

Terminals

- Ni, gold-plated


Dimensions $2,0 \times 2,5 \text{ mm}^2$, 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-B610	C61157-A7-A71	F61074-V8104-Z000

Electrostatic Sensitive Device (ESD)
Maximum ratings

Operable temperature range	T	$-40/+85$	$^{\circ}\text{C}$	
Storage temperature range	T_{stg}	$-40/+85$	$^{\circ}\text{C}$	
DC voltage	V_{DC}	3	V	
Source power	P_s	10	dBm	source impedance 50Ω , load impedance 100Ω

**SAW Components****B7725****Low-Loss Filter****1575,42 MHz****Data Sheet****Characteristics**Operating temperature range: $T_A = -30 \dots +85^\circ\text{C}$ Terminating source impedance: $Z_S = 50 \Omega$ unbal.Terminating load impedance: $Z_L = 100 \Omega$ 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	°rms
Output phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^\circ$)					
1574,42MHz ...	1576,42 MHz	-15	7	15	°
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
VSWR					
1574,42MHz ...	1576,42 MHz	—	1,4	1,8	

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

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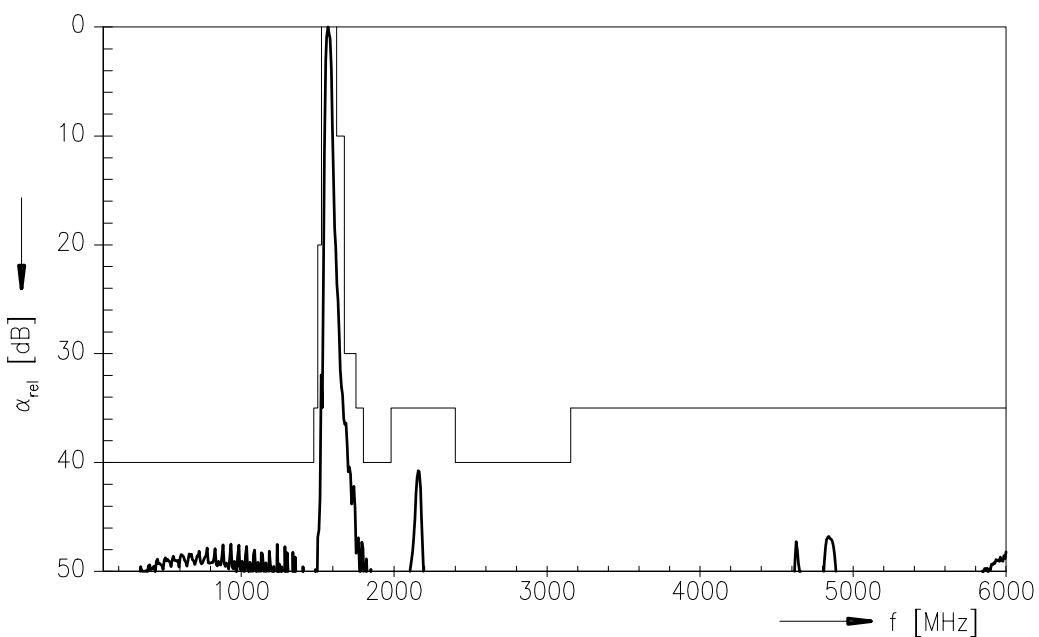
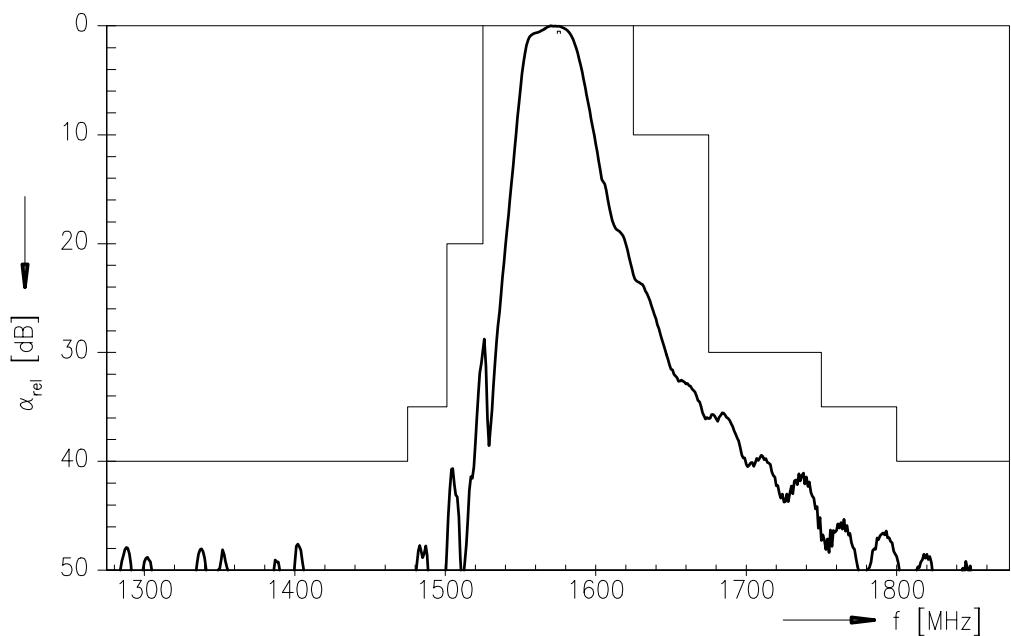
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Transfer function





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1575,42 MHz

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