



SAW Components

Data Sheet B7829





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Low-Loss Filter

1575,42 MHz

Data Sheet

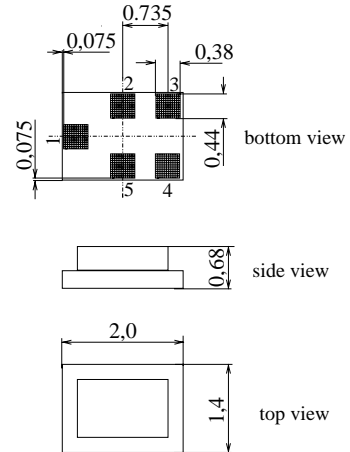
Features

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

Terminals

- Ni, gold-plated

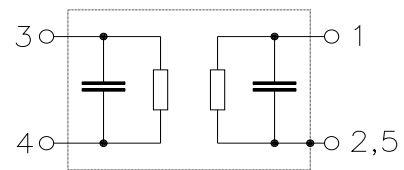
Chip Sized SAW Package



Dimensions in mm, approx. weight 0,007 g

Pin configuration

- 4 Input, unbalanced
- 1 Output, unbalanced
- 2,5 Case ground
- 3 To be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B7829	B39162-B7829-C710	C61157-A7-A82	F61074-V8151-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	source and load impedance 50 Ω continuous wave signal
ESD voltage	$V_{ESD}^{1)}$	50	V	
Input power max.				
1573,42 ... 1577,42 MHz	P_{IN}	3	dBm	
50,0...1460 MHz	P_{IN}	15	dBm	
1910 ... 4000 MHz	P_{IN}	15	dBm	
824 ... 915 MHz	P_{IN}	23	dBm	
1710 ... 1910 MHz	P_{IN}	25	dBm	

1) 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}	1574,42MHz ... 1576,42 MHz	—	1,2	1,8	dB
Amplitude ripple in passband (p-p)	$\Delta\alpha$	1574,42MHz ... 1576,42 MHz	—	0,1	0,5	dB
Group delay	τ	1574,42 ... 1576,42 MHz	—	15	50	ns
Attenuation	α					
		100,0 MHz ... 824,0 MHz	35	46	—	dB
		824,0 MHz ... 960,0 MHz	40	46	—	dB
		960,0 MHz ... 1460,0 MHz	35	48	—	dB
		1648,0 MHz ... 1660,0 MHz	25	30	—	dB
		1660,0 MHz ... 1710,0 MHz	27	33	—	dB
		1710,0 MHz ... 1805,0 MHz	33	38	—	dB
		1805,0 MHz ... 1850,0 MHz	38	46	—	dB
		1850,0 MHz ... 1990,0 MHz	40	50	—	dB
		1990,0 MHz ... 2400,0 MHz	32	37	—	dB
		2400,0 MHz ... 2500,0 MHz	35	44	—	dB
		2500,0 MHz ... 3500,0 MHz	30	41	—	dB
VSWR		1574,42MHz ... 1576,42 MHz	—	1,2	1,8	



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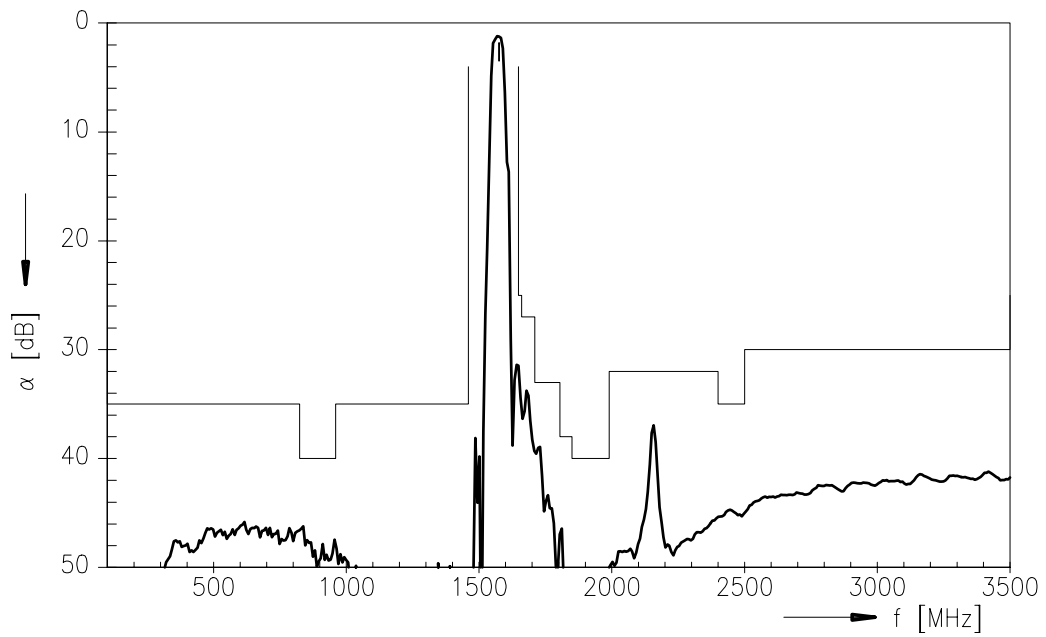
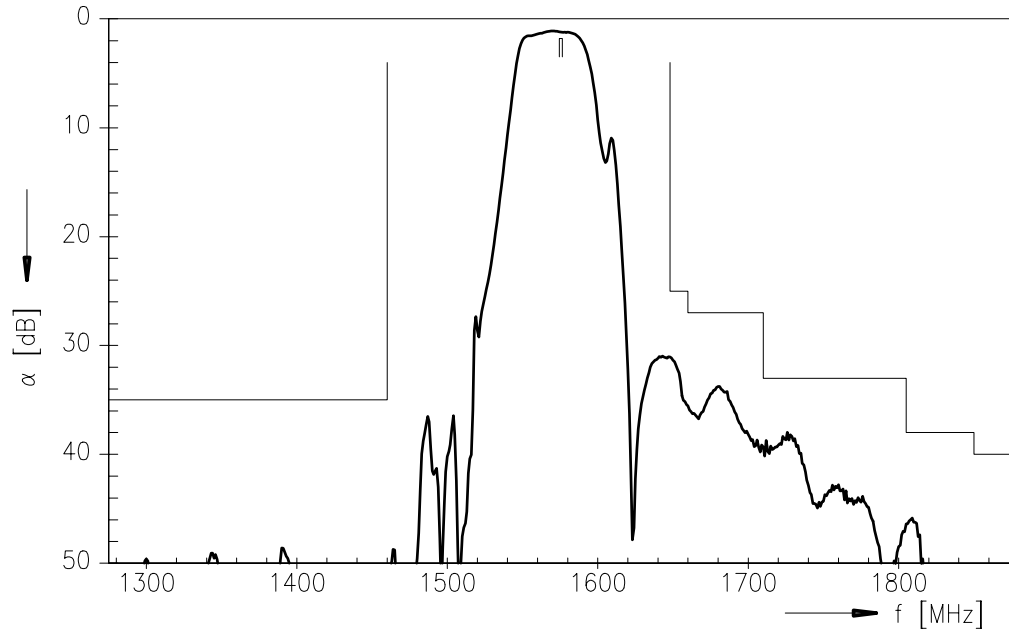
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Transfer function





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