



# SAW Components

Data Sheet B7829





**SAW Components**

**B7829**

**Low-Loss Filter**

**1575,42 MHz**

**Data Sheet**

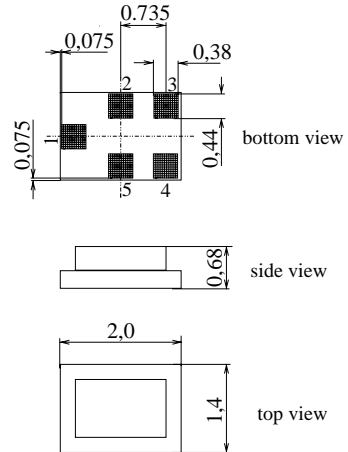
**Features**

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

**Terminals**

- Ni, gold-plated

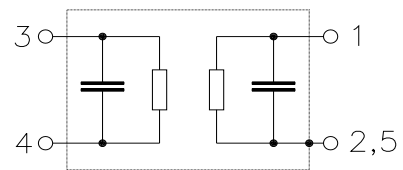
**Chip Sized SAW Package**



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 $\Omega$ 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**

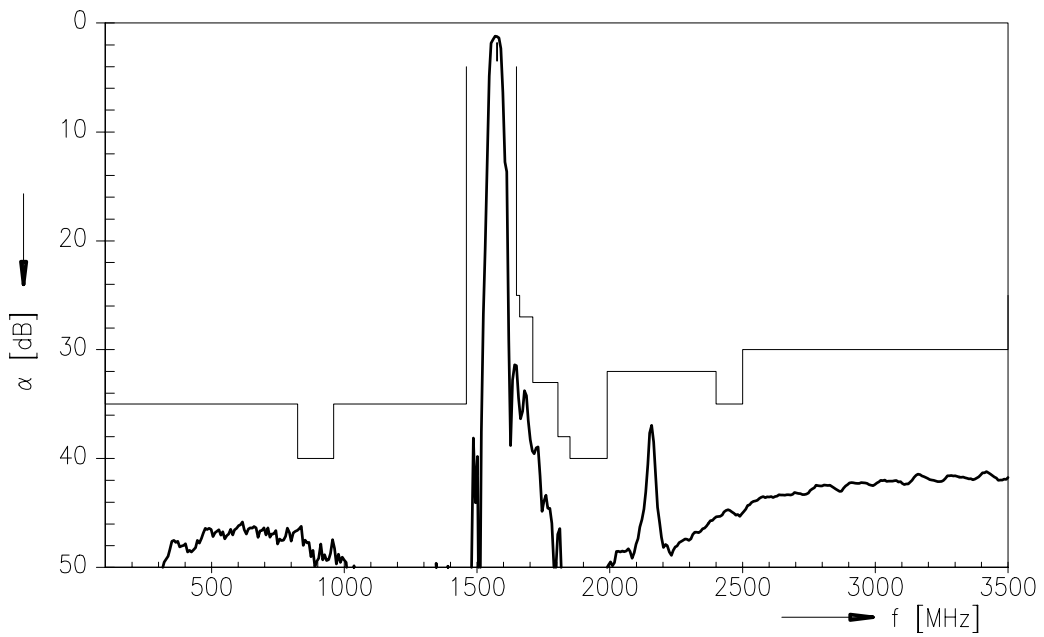
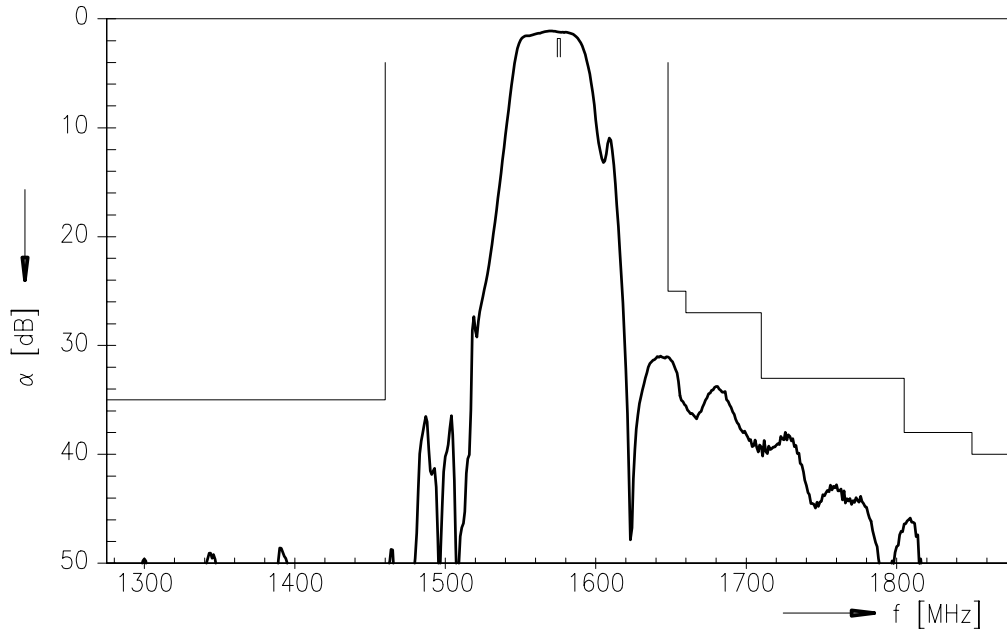
Operating temperature range:  $T_A = -30 \dots +85 \text{ }^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 50 \text{ } \Omega \text{ unbal.}$   
 Terminating load impedance:  $Z_L = 50 \text{ } \Omega \text{ unbal.}$

			<b>min.</b>	<b>typ.</b>	<b>max.</b>	
<b>Nominal frequency</b>	$f_N$		—	1575,42	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$	1574,42MHz ... 1576,42 MHz	—	1,2	1,8	dB
<b>Amplitude ripple in passband (p-p)</b>	$\Delta\alpha$	1574,42MHz ... 1576,42 MHz	—	0,1	0,5	dB
<b>Group delay</b>	$\tau$	1574,42 ... 1576,42 MHz	—	15	50	ns
<b>Attenuation</b>	$\alpha$					
		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
<b>VSWR</b>		1574,42MHz ... 1576,42 MHz	—	1,2	1,8	



Data Sheet

Transfer function





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