



# SAW Components

Data Sheet B7829

Data Sheet

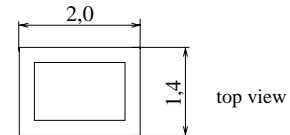
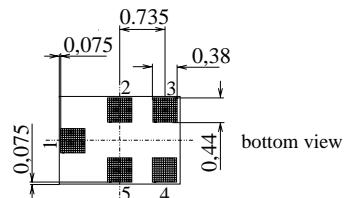
A large, stylized, italicized white text "EPCOS" is overlaid on a dark, textured background. The background features a faint, glowing globe and a series of concentric, light-colored bands resembling a stylized sun or a signal waveform.

**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**

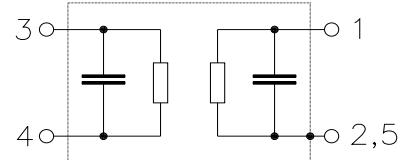
- Ni, gold-plated

**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	
Storage temperature range	$T_{stg}$	-40/+85	°C	
DC voltage	$V_{DC}$	3	V	
ESD voltage	$V_{ESD}$ <sup>1)</sup>	50	V	Machine Model , 10 pulses
Input power max.				
1573,42 ... 1577,42 MHz	$P_{IN}$	3	dBm	source and load impedance 50 Ω
50,0...1460 MHz	$P_{IN}$	15	dBm	continuous wave signal
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 &amp; 10 positive pulses

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<b>Low-Loss Filter</b>	<b>1575,42 MHz</b>

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**Characteristics**

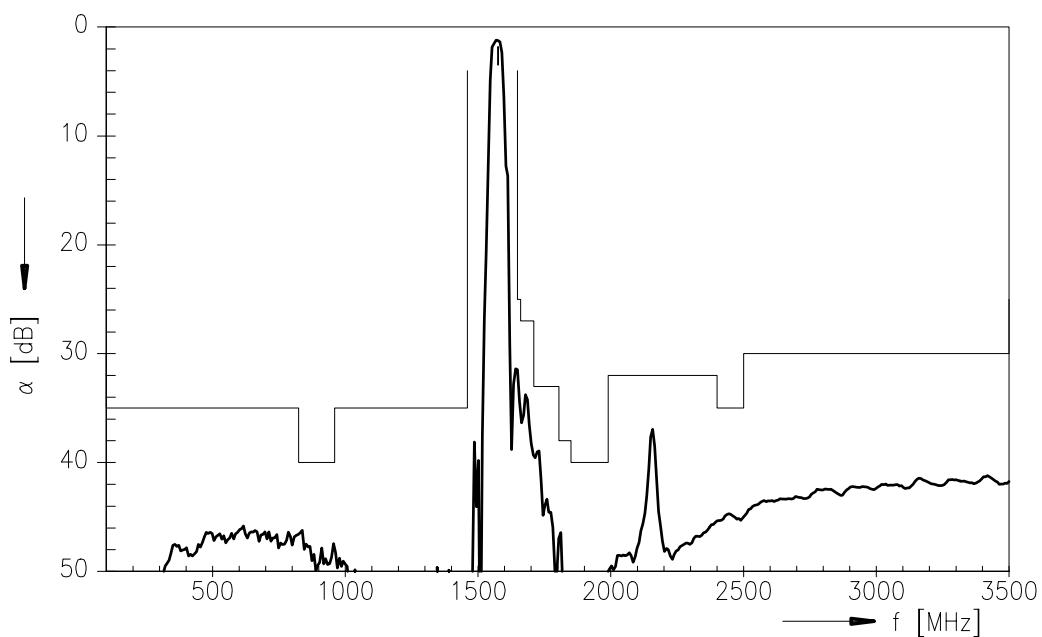
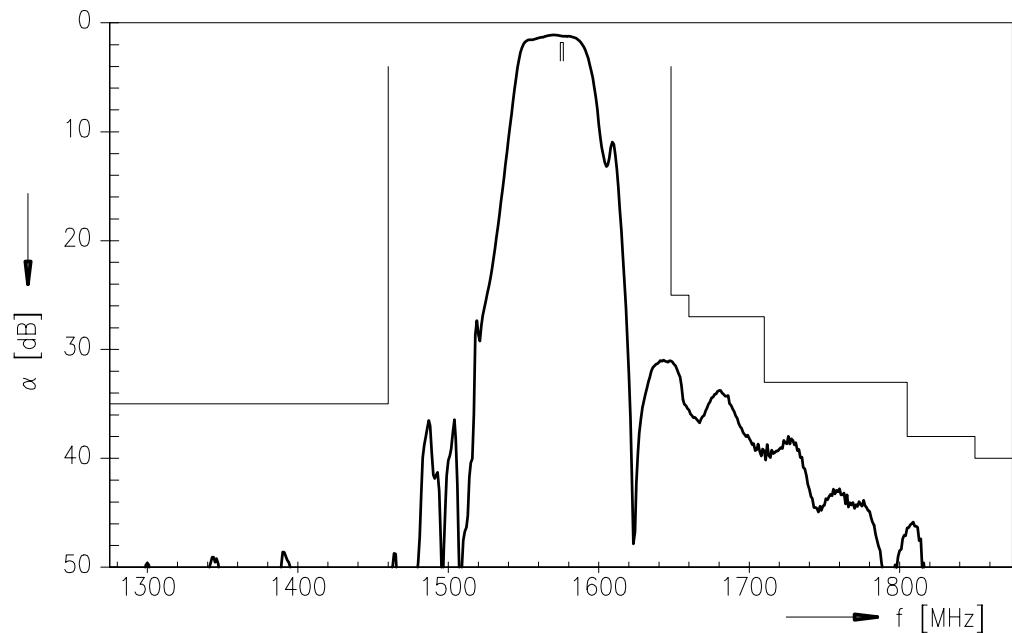
Operating temperature range:  $T_A = -30 \dots +85^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 50 \Omega$  unbal.  
 Terminating load impedance:  $Z_L = 50 \Omega$  unbal.

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

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**Low-Loss Filter** **1575,42 MHz**

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**Transfer function**





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**Low-Loss Filter**

**1575,42 MHz**

**Data Sheet**

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