



SAW Components

Data Sheet B7829

Data Sheet

A large, stylized EPCOS logo is superimposed over a grayscale image of a globe. The logo is rendered in a light, glowing font. The globe shows the outlines of continents and is partially obscured by the logo.



SAW Components

B7829

Low-Loss Filter

1575,42 MHz

Data Sheet

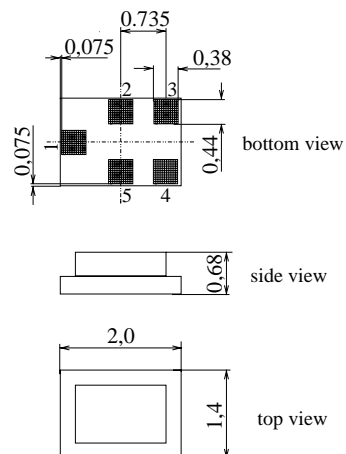
Features

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

Terminals

- Ni, gold-plated

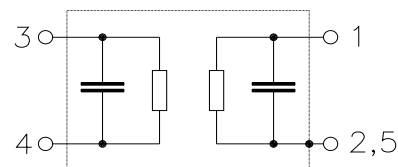
Chip Sized SAW Package



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	$V_{ESD}^{1)}$	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 & 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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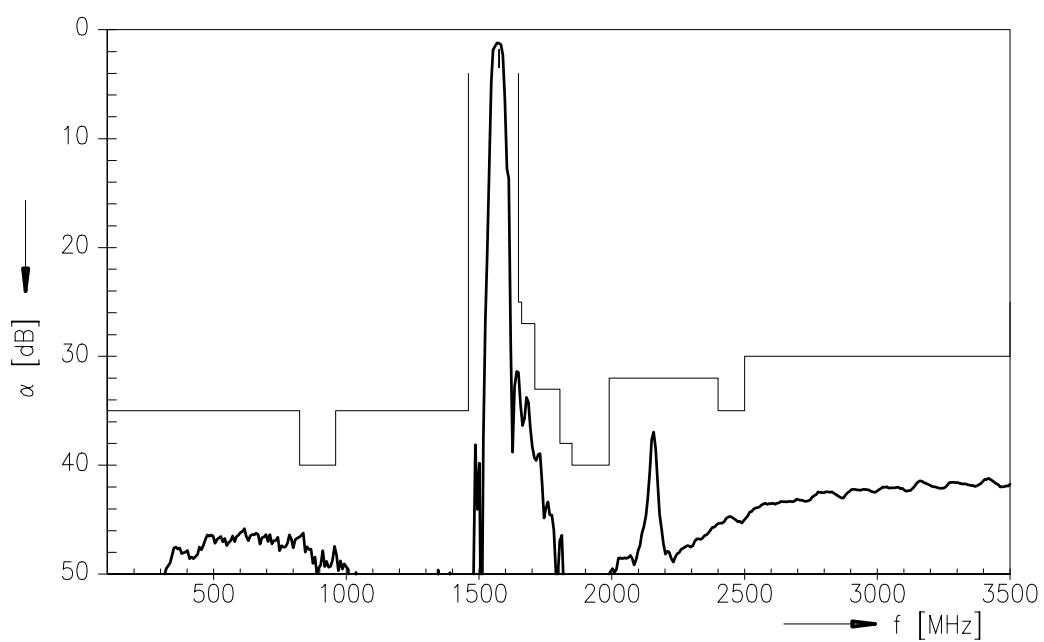
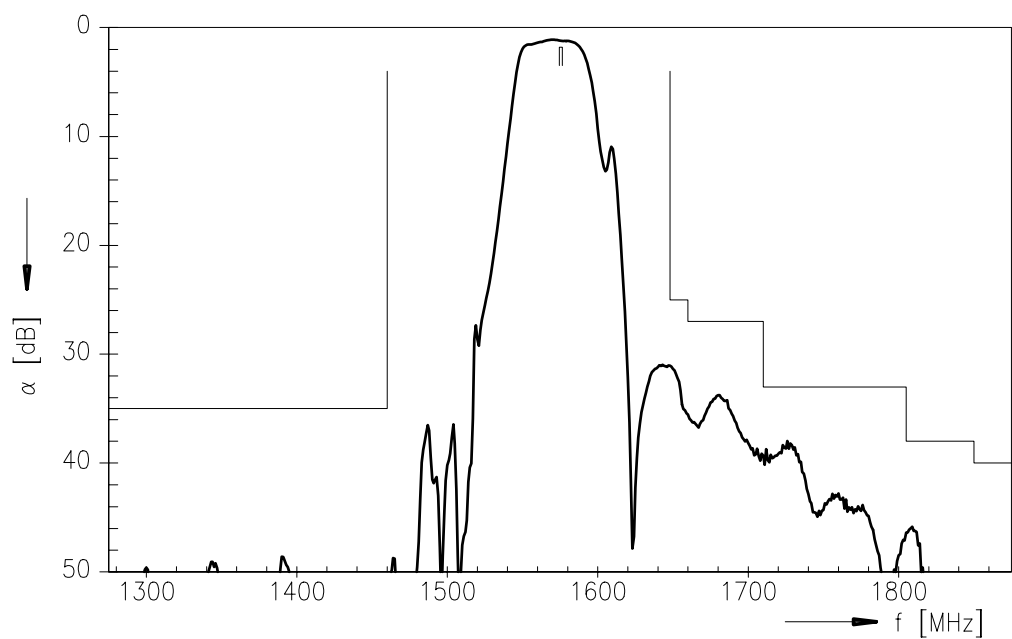
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Transfer function





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