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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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SAW Components

SAW Rx Filter

GPS

Series/Type:	B7839
Ordering code:	B39162-B7839-K410
Date:	Nov 16, 2005
Version:	2.1



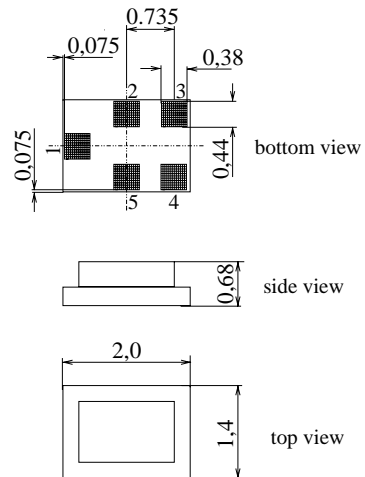
Application

- Low-loss RF filter for GPS
- Unbalanced to unbalanced operation
- Very low insertion attenuation



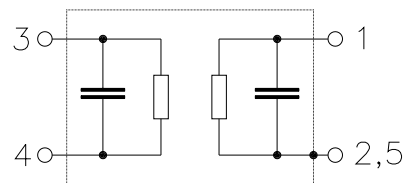
Features

- Package size 2.0 x 1.4 x 0.68 mm³
- Package code QCS5E
- RoHS compliant
- Approx. weight 0.007 g
- Package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals



Pin configuration

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





SAW Components

B7839

Low-Loss Filter for Mobile Communication

1575.42 MHz

Data Sheet



Characteristics

Operating temperature range: $T = -30\text{ °C} \dots +85\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

		B7839			
		min.	typ. @ 25 °C	max.	
Nominal frequency	f_N	—	1575.42	—	MHz
Maximum insertion attenuation	α_{max}				
1574.42 ... 1576.42MHz		—	0.75	1.1	dB
1574.42 ... 1576.42MHz		—	0.75	1.0	dB ¹⁾
Amplitude ripple in passband (p-p)	$\Delta\alpha$				
1574.42 ... 1576.42MHz		—	0.05	0.3	dB
Attenuation	α				
0.1 ... 960.0 MHz		38	41	—	dB
960.0 ... 1460.0 MHz		35	40	—	dB
1460.0 ... 1513.0 MHz		22	29	—	dB
1645.4 ... 1710.0 MHz		23	28	—	dB
1710.0 ... 1990.0 MHz		35	40	—	dB
1990.0 ... 4000.0 MHz		30	35	—	dB
4000.0 ... 6000.0 MHz		20	28	—	dB
VSWR					
1574.42 ... 1576.42MHz		—	1.1	1.8	

¹⁾ 0 °C ... +55 °C

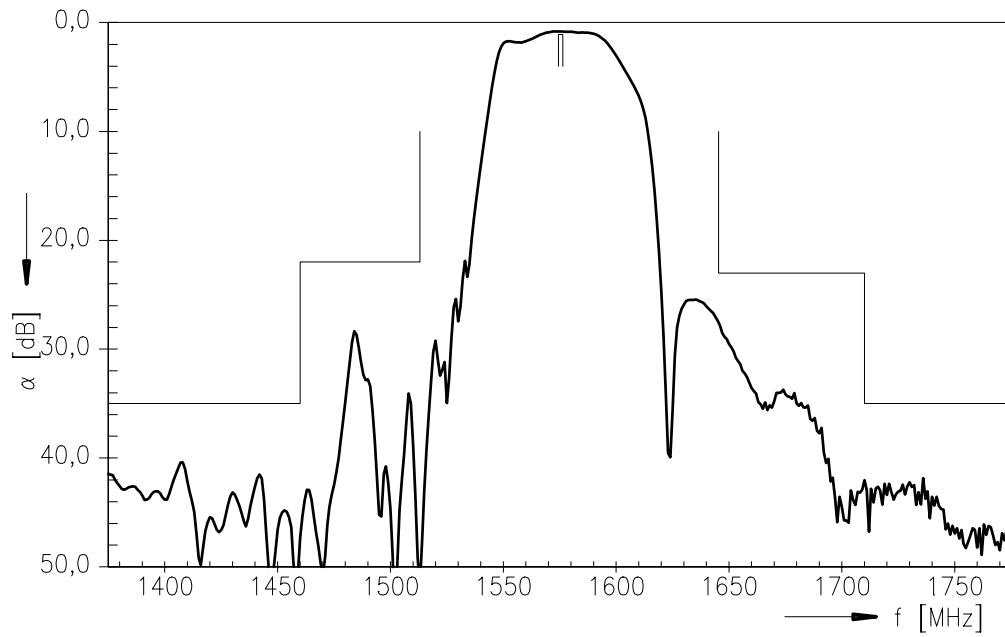
Maximum ratings

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}	50 ¹⁾	V	machine model, 10 pulses
Input Power at				
1574.42 ... 1576.42 MHz	P _{IN}	3	dBm	source and load impedance 50 Ω
50.0...1460 and 1710 ... 4000 MHz	P _{IN}	25	dBm	continuous wave signal

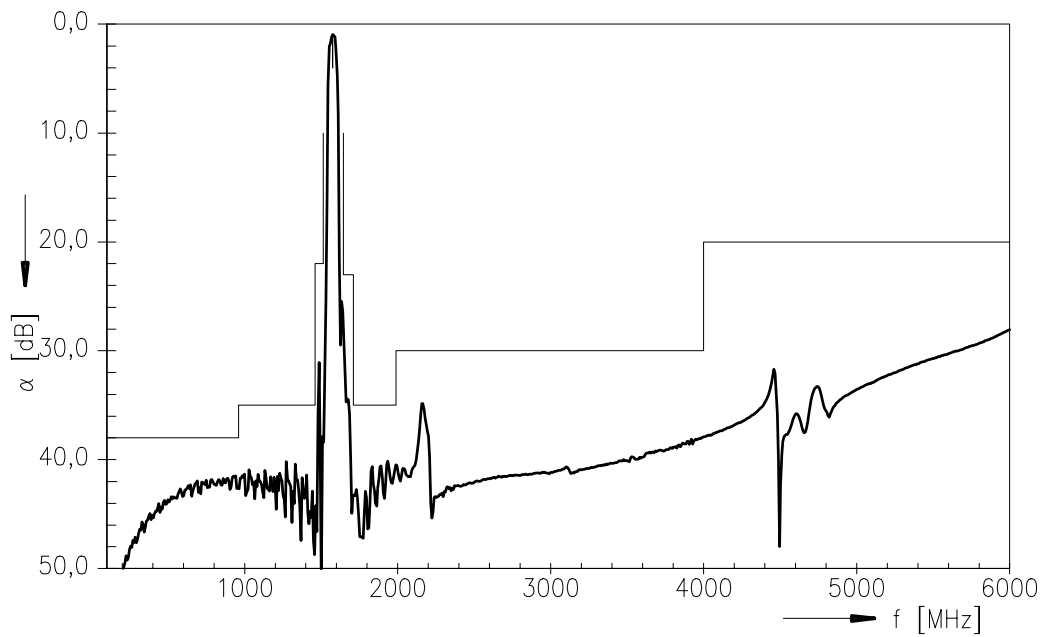
¹⁾ acc. to JESD22-A115A (machine model), 10 negative & 10 positive pulses.



Transfer function

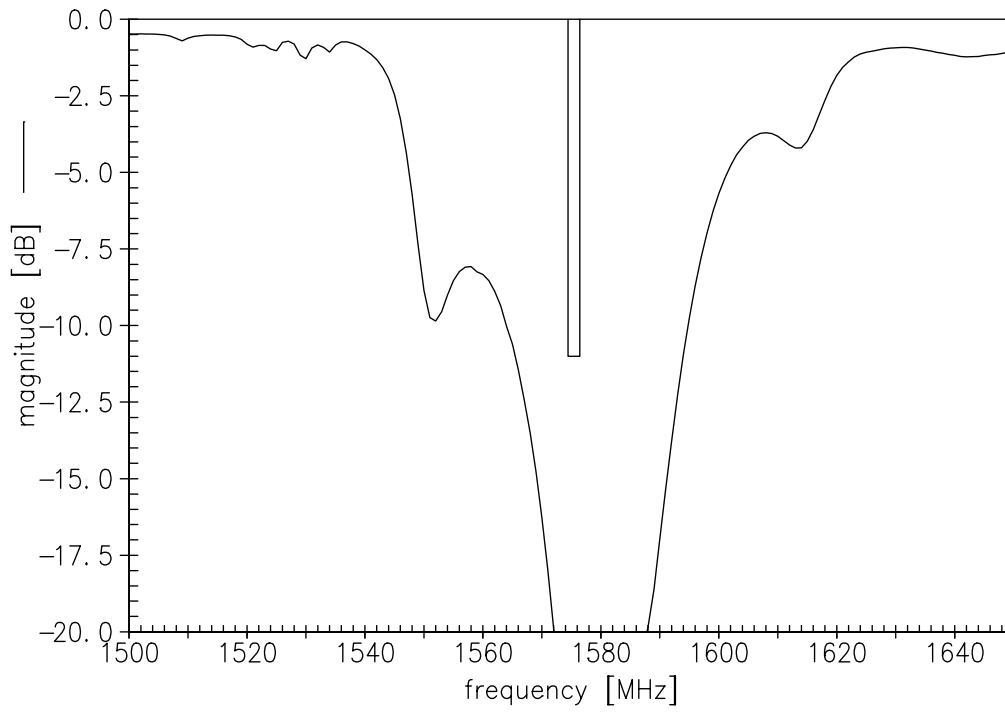


Transfer function (wideband)

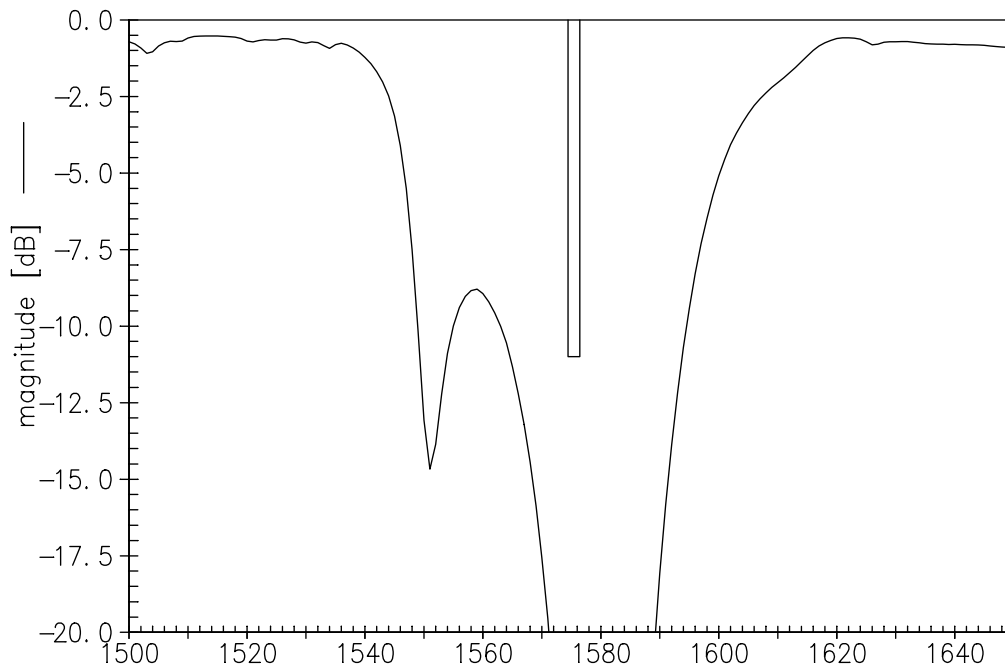




S₁₁ function



S₂₂ function





SAW Components

B7839

Low-Loss Filter for Mobile Communication

1575.42 MHz

Data Sheet



Type	B7839	
Ordering code	B39162-B7839-K410	
Marking and Package	C61157-A7-A131	
Packaging	F61074-V8151-Z000	
Date Codes	L_1126	
S-Parameters	B7839_NB.s3p B7839_WB.s3p	
Soldering profile	S_6001	

For further information please contact your local EPCOS sales office or visit our webpage at www.epcos.com.

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