



SAW Components

SAW Rx Filter

GPS

Series/Type:

B7839

Ordering code:

B39162-B7839-K410

Date:

Nov 16, 2005

Version:

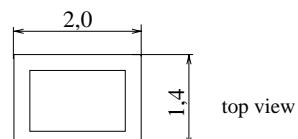
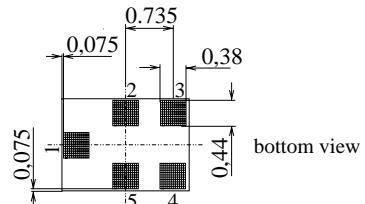
2.1

Application

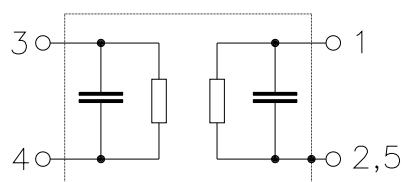
- Low-loss RF filter for GPS
- Unbalanced to unbalanced operation
- Very low insertion attenuation


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: $T = -30 \text{ }^{\circ}\text{C} \dots +85 \text{ }^{\circ}\text{C}$
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	—
Maximum insertion attenuation	α_{max}	—	0.75	1.1
1574.42 ... 1576.42MHz		—	0.75	1.0
1574.42 ... 1576.42MHz		—	0.75	1.0
Amplitude ripple in passband (p-p)	$\Delta\alpha$	—	0.05	0.3
1574.42 ... 1576.42MHz		—	0.05	0.3
Attenuation	α	38	41	—
0.1 ... 960.0 MHz		38	41	—
960.0 ... 1460.0 MHz		35	40	—
1460.0 ... 1513.0 MHz		22	29	—
1645.4 ... 1710.0 MHz		23	28	—
1710.0 ... 1990.0 MHz		35	40	—
1990.0 ... 4000.0 MHz		30	35	—
4000.0 ... 6000.0 MHz		20	28	—
VSWR		—	1.1	1.8
1574.42 ... 1576.42MHz		—	1.1	1.8

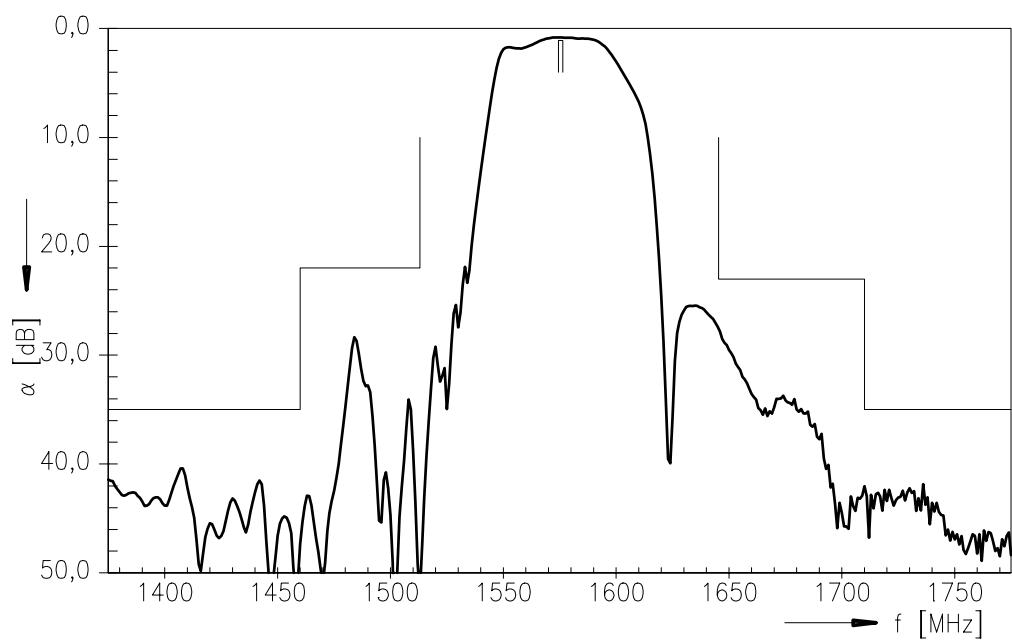
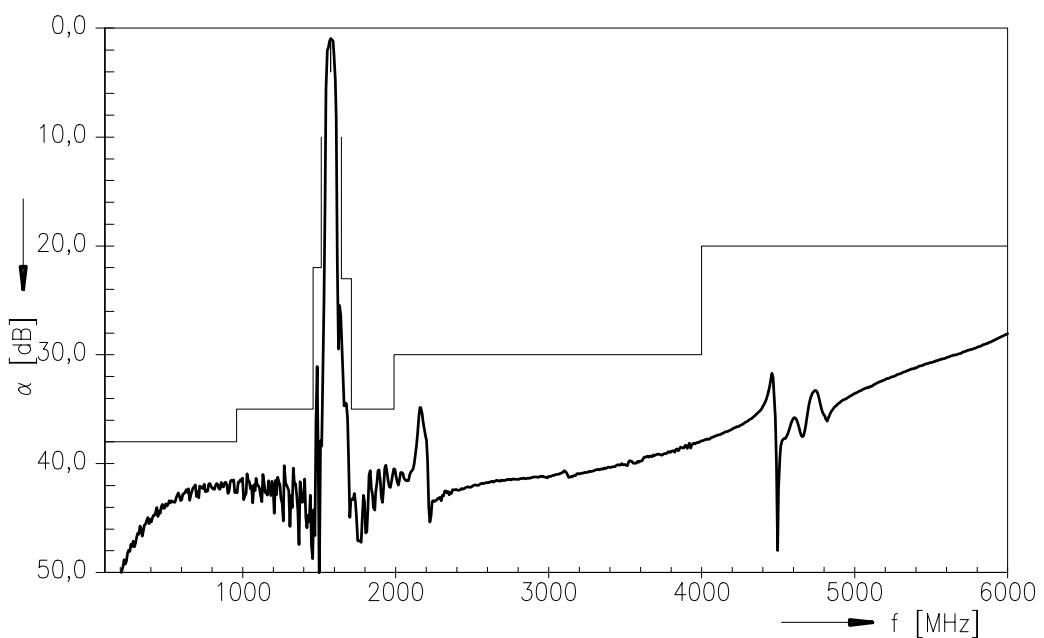
¹⁾ 0 }
°C ... +55 }
°C

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				continuous wave signal
1710 ... 4000 MHz	P_{IN}	25	dBm	

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

Please read *cautions and warnings and
important notes* at the end of this document.

Transfer function

Transfer function (wideband)




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B7839

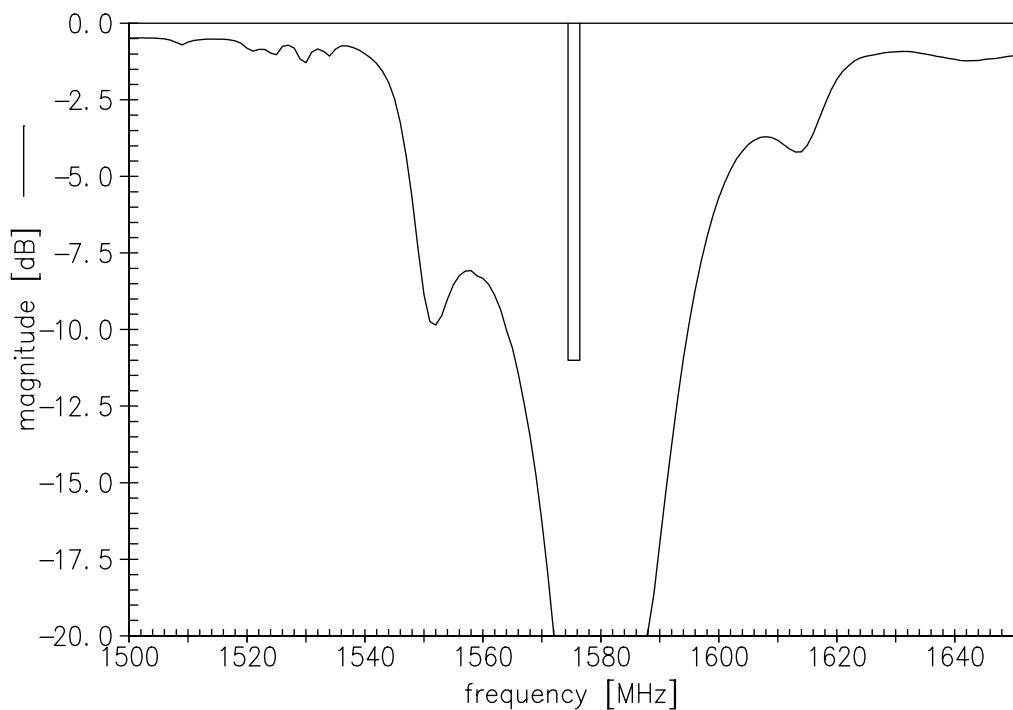
Low-Loss Filter for Mobile Communication

1575.42 MHz

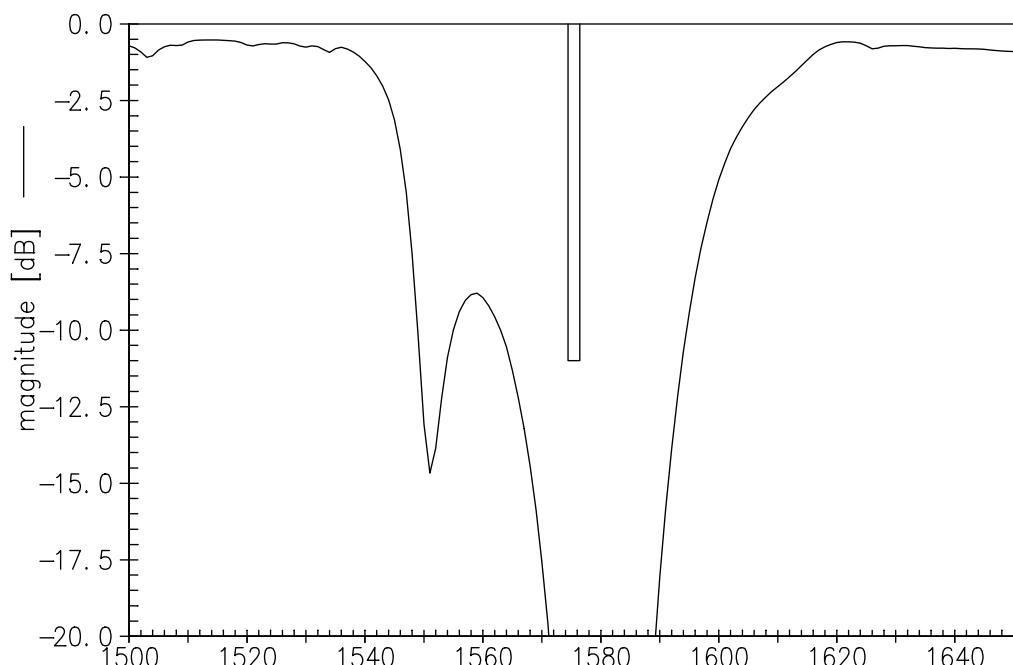
Data Sheet



S₁₁ function



S₂₂ function



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**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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Surface Acoustic Wave Components Division

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Please read *cautions and warnings and important notes* at the end of this document.

6 Nov 16, 2005



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