



# SAW Filters for Mobile Communications

## **Series/Type: B9037**

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39162B9037E910	B39162B9444M410	2012-07-27	2012-10-21	2013-01-21

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# SAW Components

B9037

## SAW GPS filter

1575.42 MHz

### Data Sheet



#### Characteristics of Filter

Temperature range for specification:  $T = -30\text{ °C to }+85\text{ °C}$   
Terminating source impedance:  $Z_S = 50\ \Omega$   
Terminating load impedance:  $Z_L = 50\ \Omega$

		B9037 <sup>1)</sup>			DGL <sup>2)</sup>	
		min.	typ. @ 25 °C	max.	min./ max.	
<b>Center frequency</b>	$f_C$	—	1575.42	—		MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$					
1574.42 ... 1576.42 MHz		—	0.9	1.4		dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$					
1574.42 ... 1576.42 MHz		—	0.05	0.5		dB
<b>Return loss (Input and Output)</b>						
1574.42 ... 1576.42 MHz		10	18	—		dB
<b>Attenuation</b>	$\alpha$					
0.3 ... 1522.42 MHz		30	35	—		dB
1628.42 ... 1750.0 MHz		30	38	—		dB
1750.0 ... 1990.0 MHz		32	39	—		dB
1990.0 ... 3000.0 MHz		30	38	—		dB
3000.0 ... 4000.0 MHz		20	33	—		dB
4000.0 ... 6000.0 MHz		17	28	—		dB

<sup>1)</sup> Values in columns min, typ and max indicate the development status of the current version.

<sup>2)</sup> Values in column DesignGoal (DGL) indicate the target performance.



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### Maximum ratings of Filter

Operable temperature range	T	−40/+85	°C	
Storage temperature range	T <sub>stg</sub>	−40/+85	°C	
DC voltage	V <sub>DC</sub>	5	V	
ESD voltage	V <sub>ESD</sub>	50 <sup>1)</sup>	V	machine model, 10 pulses
Input power	P <sub>IN</sub>	0	dBm	cw

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



SAW Components

B9037

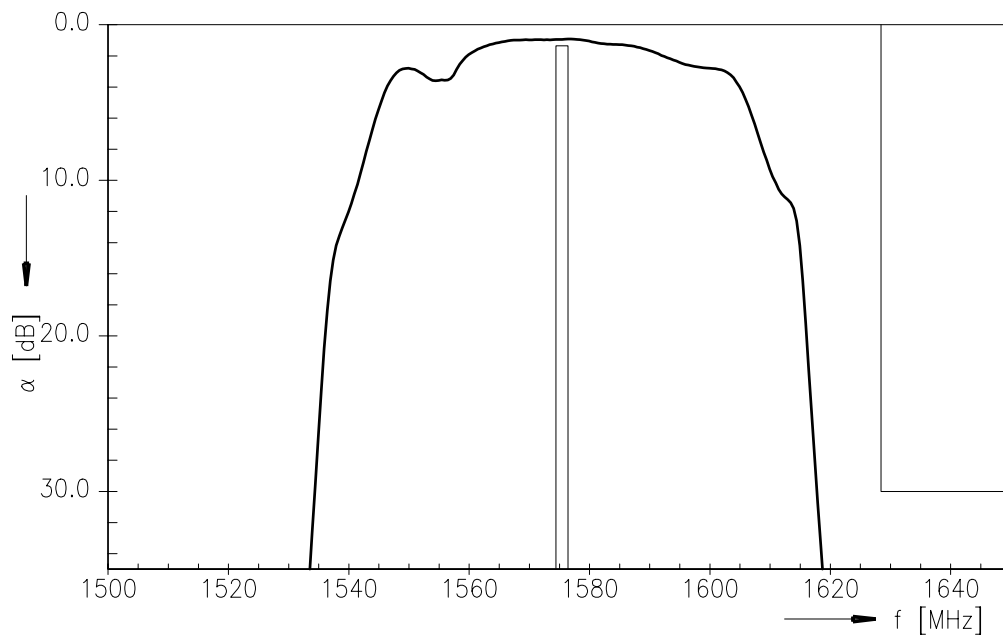
SAW GPS filter

1575.42 MHz

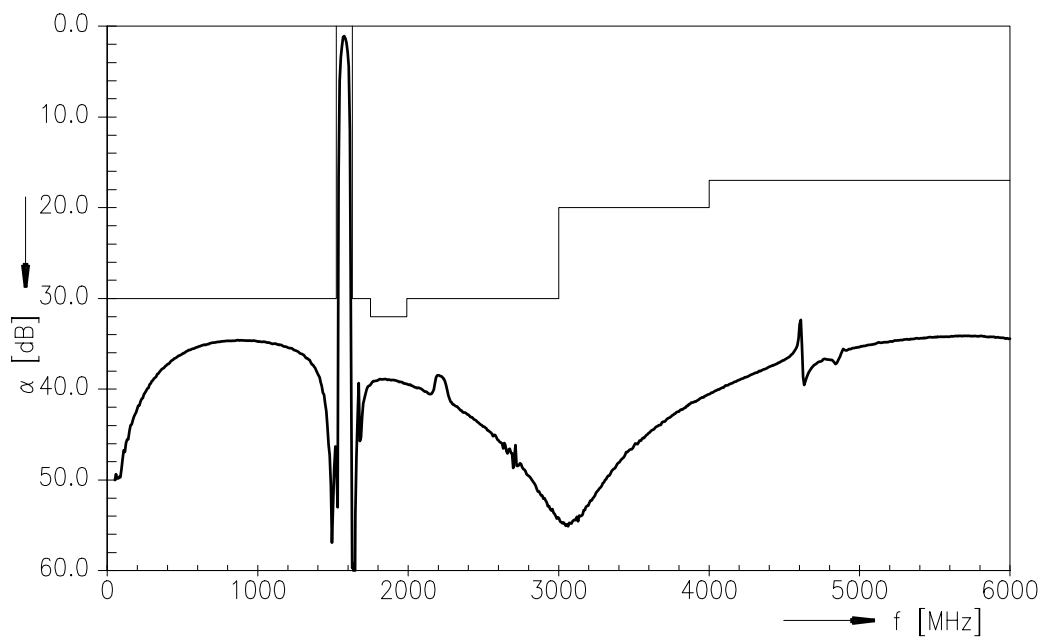
Data Sheet



### Transfer function (passband)



### Transfer function



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



SAW Components

B9037

SAW GPS filter

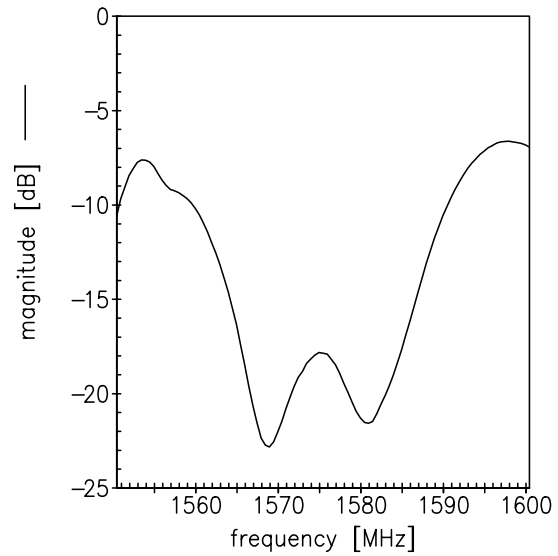
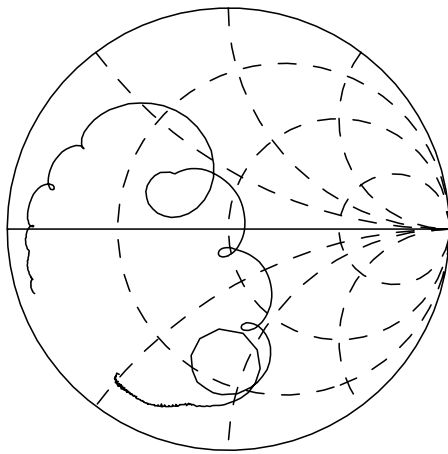
1575.42 MHz

Data Sheet

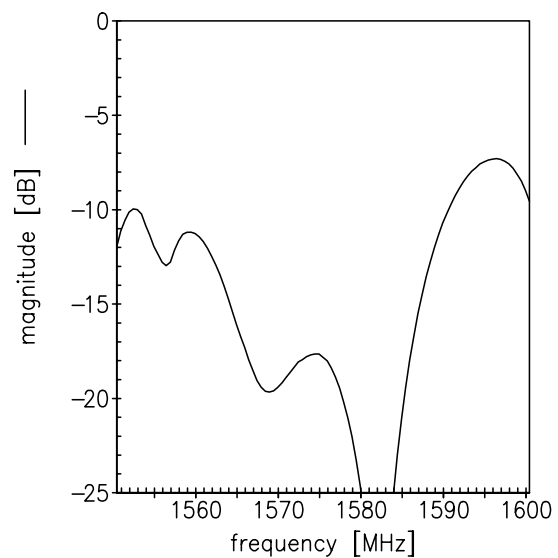
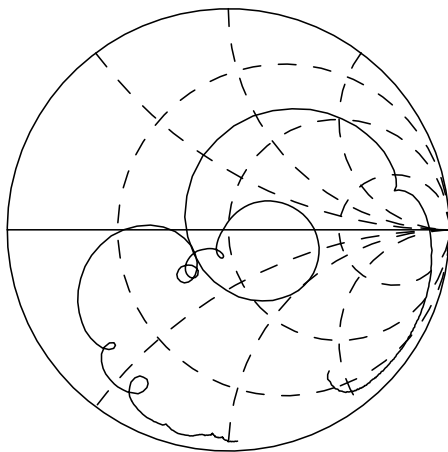


Smith chart / Return loss

$S_{11}$  function



$S_{22}$  function



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**References**

<b>Type</b>	B9037
<b>Ordering code</b>	B39162-B9037-E910
<b>Marking and package</b>	C61157-A7-A105
<b>Packaging</b>	F61074-V8152-Z000
<b>Date codes</b>	L_1126
<b>S-parameters</b>	B9037_NB.s2p B9037_WB.s2p
<b>Soldering profile</b>	S_6001
<b>RoHS compatible</b>	defined as compatible with the following documents: "DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment. 2005/618/EC from April 18th, 2005, amending Directive 2002/95/EC of the European Parliament and of the Council for the purposes of establishing the maximum concentration values for certain hazardous substances in electrical and electronic equipment."

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