



## SAW Components

### SAW Rx Filter

GSM 850

<b>Series/Type:</b>	<b>B9035</b>
<b>Ordering code:</b>	<b>B39881-B9035-E610</b>
<b>Date:</b>	<b>Dec 06, 2005</b>
<b>Version:</b>	<b>2.0</b>



## SAW Components

B9035

## Low-Loss Filter for Mobile Communication

881.5 MHz

### Data Sheet



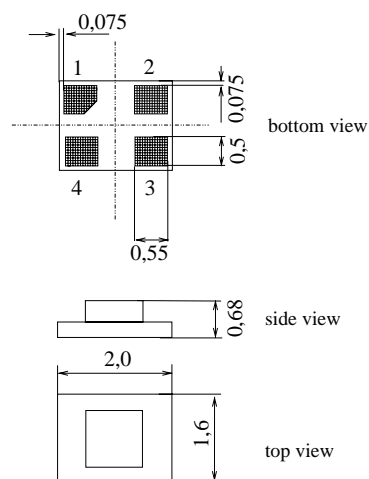
#### Application

- Low-loss RF filter for mobile telephone  
Cellular systems, CDMA and W-CDMA  
receive path (Rx)
- Very high Tx suppression
- For operation in Rx diversity path
- Usable passband 25 MHz
- Unbalanced operation
- Impedance 50  $\Omega$  input and output



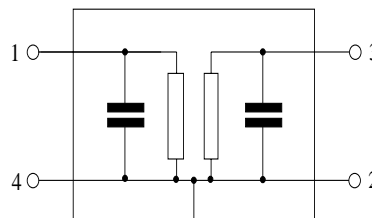
#### Features

- Package size 2.0 x 1.6 x 0.68 mm<sup>3</sup>
- RoHS compliant
- Approx. weight 0.007 g
- Package for **Surface Mount Technology (SMT)**
- Ni, gold-plated terminals



#### Pin configuration

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





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# Data Sheet



## Characteristics

Operating temperature range:	$T$ = -30 to +85 °C
Terminating source impedance:	$Z_S$ = 50Ω
Terminating load impedance:	$Z_L$ = 50Ω

				B9035			
				min.	typ. @ 25°C	max.	
<b>Center frequency</b>	$f_C$			—	881.5	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{max}$			—	2.1	2.5	dB
	869.0 ... 894.0 MHz			—	2.1	2.5	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$			—	0.7	1.2	dB
	869.0 ... 894.0 MHz			—	0.7	1.2	dB
<b>Input VSWR</b>				—	1.7	2.0	
	869.0 ... 894.0 MHz			—	1.7	2.0	
<b>Output VSWR</b>				—	1.7	2.0	
	869.0 ... 894.0 MHz			—	1.7	2.0	
<b>Attenuation</b>	$\alpha$						
	0.3 ... 824.0 MHz			46	53	—	dB
	824.0 ... 849.0 MHz			46	53	—	dB
	914.0 ... 950.0 MHz			20	30	—	dB
	950.0 ... 1500.0 MHz			46	60	—	dB
	1500.0 ... 2200.0 MHz			46	56	—	dB
	2200.0 ... 3000.0 MHz			30	41	—	dB
	3000.0 ... 4500.0 MHz			20	30	—	dB
	4500.0 ... 6000.0 MHz			15	20	—	dB

## Maximum ratings

Operable temperature range	$T$	-30/+85	°C	machine model, 10 pulses
Storage temperature range	$T_{stg}$	-40/+85	°C	
DC voltage	$V_{DC}$	5	V	
ESD voltage	$V_{ESD}$	100 <sup>1)</sup>	V	
Input Power	$P_{IN}$	15	dBm	

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



**SAW Components**

**B9035**

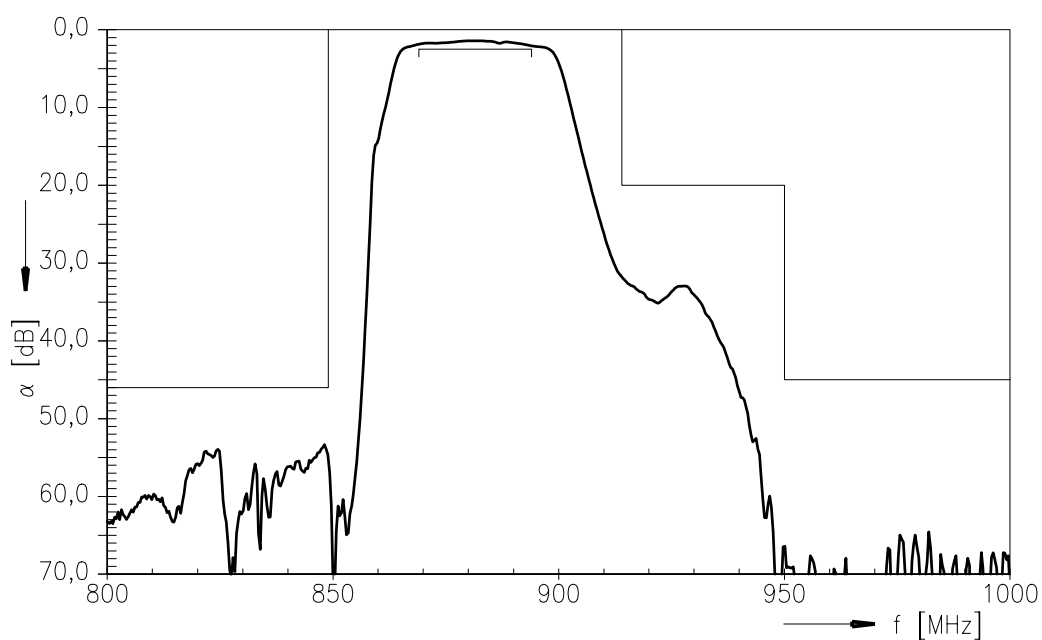
**Low-Loss Filter for Mobile Communication**

**881.5 MHz**

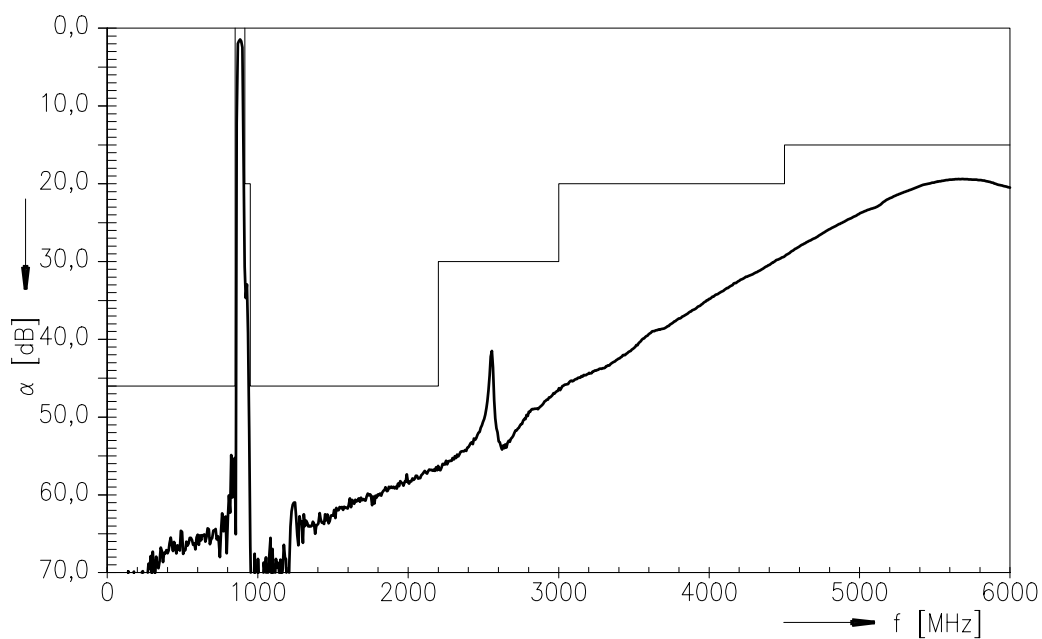
**Data Sheet**



**Transfer function**



**Transfer function**





**SAW Components**

**B9035**

**Low-Loss Filter for Mobile Communication**

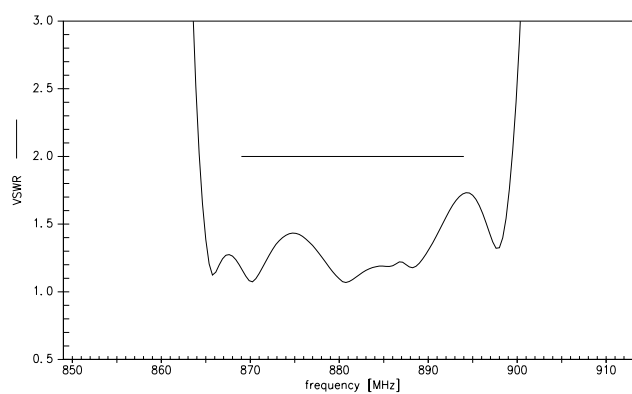
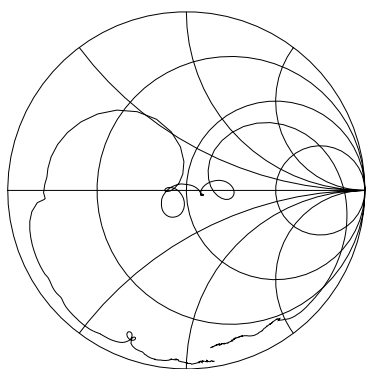
**881.5 MHz**

Data Sheet

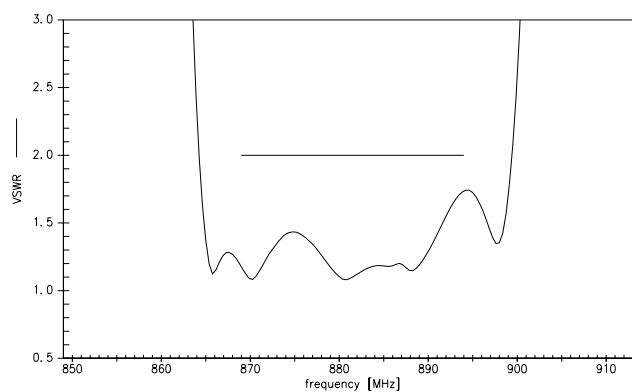
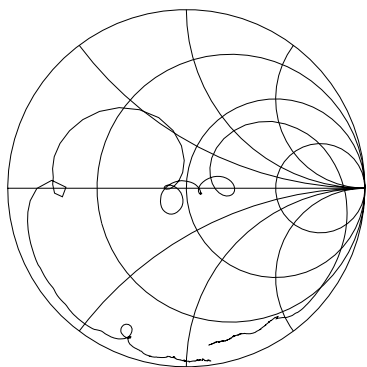


Smith chart / VSWR

**$S_{11}$  function**



**$S_{22}$  function**





<b>SAW Components</b>	<b>B9035</b>
<b>Low-Loss Filter for Mobile Communication</b>	<b>881.5 MHz</b>
<b>Data Sheet</b>	<b>SMD</b>

<b>Type</b>	B9035	
<b>Ordering code</b>	B39881-B9035-E610	
<b>Marking and Package</b>	C61157-A7-A113	
<b>Packaging</b>	F61074-V8152-Z000	
<b>Date Codes</b>	L_1126	
<b>S-Parameters</b>	B9035_NB.s3p B9035_WB.s3p	
<b>Soldering profile</b>	S_6001	

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