



# SAW Components

Data Sheet B9024





**SAW Components**

**B9024**

**Low-Loss Filter for Mobile Communication**

**942,5 MHz**

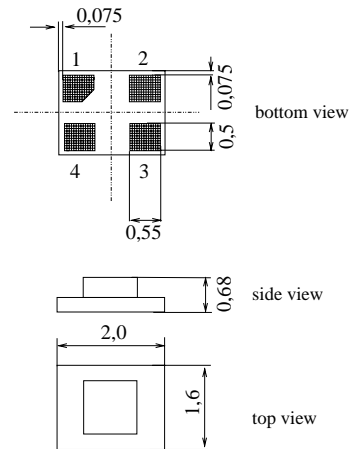
**Data Sheet**



**Features**

- Low-loss RF filter for mobile telephone EGSM system, receive path
- Usable passband 35 MHz
- Unbalanced operation
- Impedance 50 Ω input and output
- Ceramic Package for Surface Mounted Technology (SMT)

**Chip sized SAW package DCS4F**



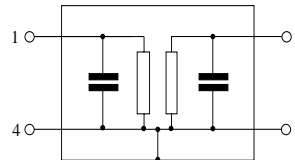
**Terminals**

- Ni, gold-plated

Dimensions in mm, approx. weight 6 mg

**Pin configuration**

- 1 Input, unbalanced
- 3 Output, unbalanced
- 2,4 Case ground



Type	Ordering code	Marking and Package according to	Packing according to
B9024	B39941-B9024-E610	C61157-A7-A113	F61074-V8152-Z000

**Electrostatic Sensitive Device (ESD)**

**Maximum ratings**

Operable temperature range	$T$	- 30 / + 85	°C	machine model, 10 pulses peak power of GSM signal, duty cycle 4:8
Storage temperature range	$T_{stg}$	- 40 / + 85	°C	
DC voltage	$V_{DC}$	3	V	
ESD voltage	$V_{ESD}^*$	100*	V	
Input power at GSM850, GSM900 GSM1800 and GSM1900 Tx bands	$P_{IN}$	15	dBm	

\* acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses



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**Characteristics**

Operating temperature:  $T = -25 \dots +75 \text{ }^\circ\text{C}$   
 Terminating source impedance:  $Z_S = 50 \text{ } \Omega$   
 Terminating load impedance:  $Z_L = 50 \text{ } \Omega$

			min.	typ. (25 °C)	max.	
<b>Center frequency</b>	$f_C$		—	942,5	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$	925,0 ... 960,0 MHz	—	1,9	2,5	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$	925,0 ... 960,0 MHz	—	0,9	1,5	dB
<b>Input VSWR</b>		925,0 ... 960,0 MHz	—	2,1	2,4	
<b>Output VSWR</b>		925,0 ... 960,0 MHz	—	2,2	2,4	
<b>Attenuation</b>	$\alpha$					
		0,0 ... 890,0 MHz	33	38	—	dB
		890,0 ... 905,0 MHz	25	31	—	dB
		905,0 ... 915,0 MHz	19	26	—	dB
		980,0 ... 1015,0 MHz	23	25	—	dB
		1015,0 ... 1025,0 MHz	25	32	—	dB
		1025,0 ... 2500,0 MHz	30	35	—	dB
		2500,0 ... 6000,0 MHz	30	42	—	dB



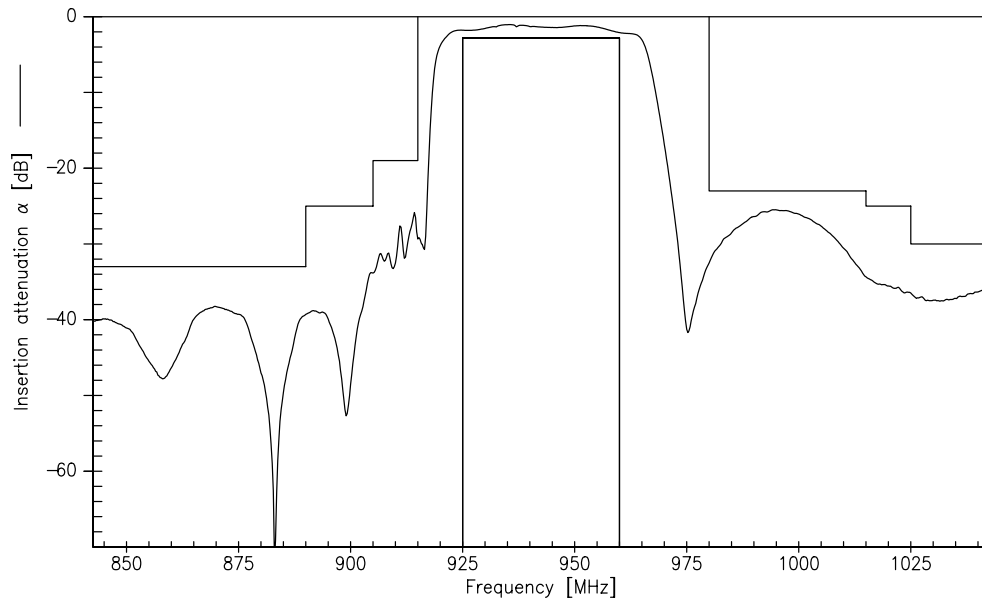
**Characteristics**

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

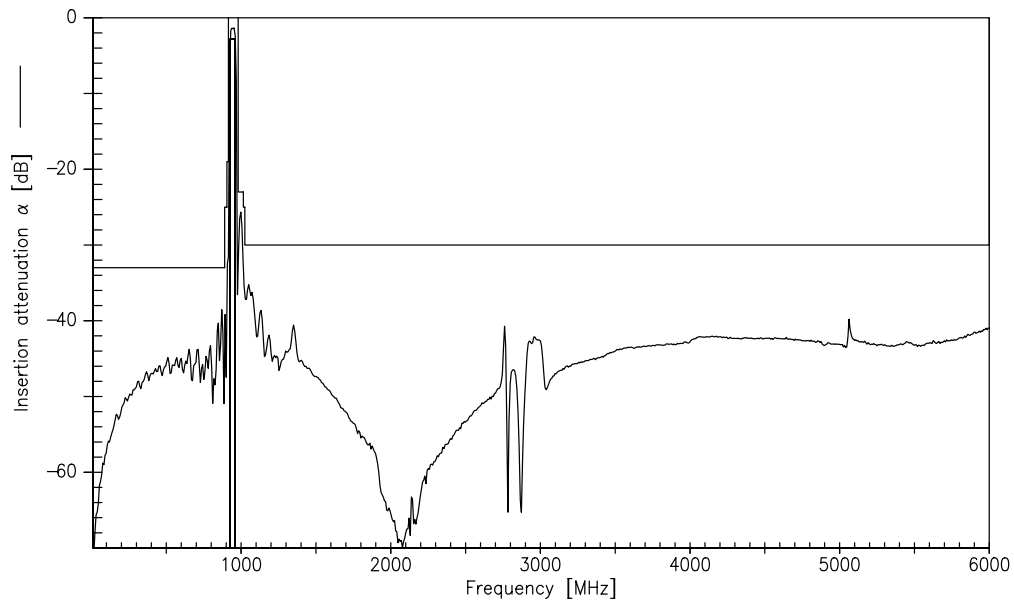
		min.	typ. (25 °C)	max.	
<b>Center frequency</b>	$f_C$	—	942,5	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$	—	1,9	2,8	dB
925,0 ... 960,0	MHz				
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$	—	0,9	1,8	dB
925,0 ... 960,0	MHz				
<b>Input VSWR</b>		—	2,1	2,4	
925,0 ... 960,0	MHz				
<b>Output VSWR</b>		—	2,2	2,4	
925,0 ... 960,0	MHz				
<b>Attenuation</b>	$\alpha$				
0,0 ... 890,0	MHz	33	38	—	dB
890,0 ... 905,0	MHz	25	31	—	
905,0 ... 915,0	MHz	19	26	—	
980,0 ... 1015,0	MHz	23	25	—	
1015,0 ... 1025,0	MHz	25	32	—	
1025,0 ... 2500,0	MHz	30	35	—	
2500,0 ... 6000,0	MHz	30	42	—	



Transfer function (measurement)



Transfer function (wideband measurement)





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