



SAW Components

Data Sheet B9024





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B9024

Low-Loss Filter for Mobile Communication

942,5 MHz

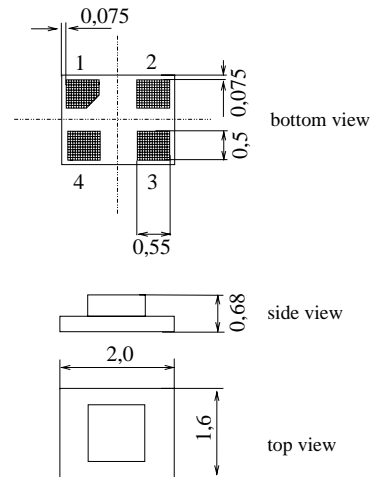
Data Sheet



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



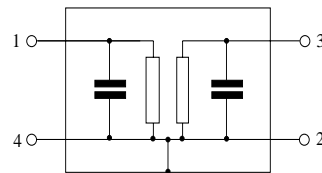
Terminals

- 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.	
Center frequency	f_c		—	942,5	—	MHz
Maximum insertion attenuation	α_{\max}					
		925,0 ... 960,0 MHz	—	1,9	2,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
		925,0 ... 960,0 MHz	—	0,9	1,5	dB
Input VSWR						
		925,0 ... 960,0 MHz	—	2,1	2,4	
Output VSWR						
		925,0 ... 960,0 MHz	—	2,2	2,4	
Attenuation	α					
		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



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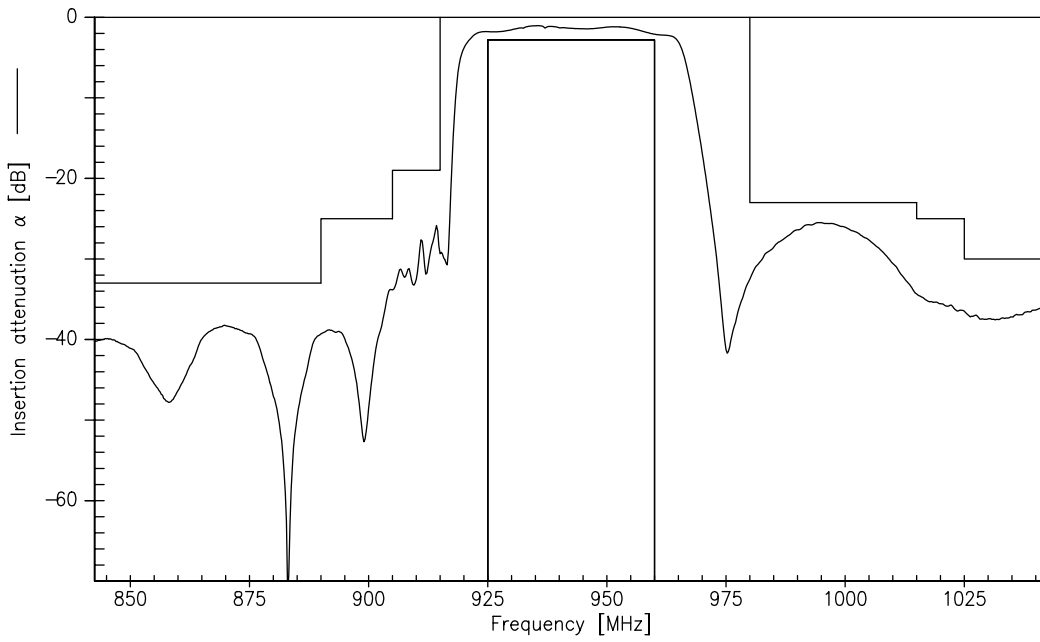
Characteristics

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

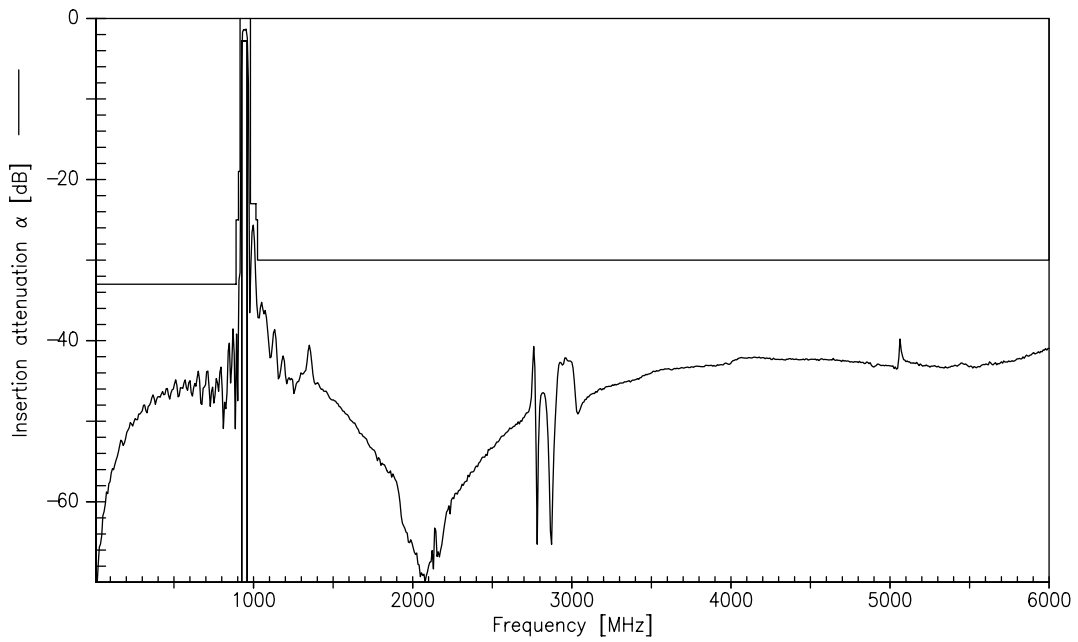
			min.	typ. (25 °C)	max.	
Center frequency	f_c		—	942,5	—	MHz
Maximum insertion attenuation	α_{\max}					
		925,0 ... 960,0 MHz	—	1,9	2,8	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
		925,0 ... 960,0 MHz	—	0,9	1,8	dB
Input VSWR						
		925,0 ... 960,0 MHz	—	2,1	2,4	
Output VSWR						
		925,0 ... 960,0 MHz	—	2,2	2,4	
Attenuation	α					
		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



Transfer function (measurement)



Transfer function (wideband measurement)





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