



SAW Components

Data Sheet B9022





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B9022

Low-Loss Filter for Mobile Communication

881,5 MHz

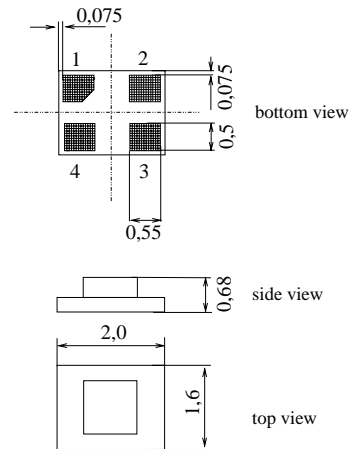
Data Sheet



Features

- Low-loss RF filter for mobile telephone Cellular systems, receive path
- Usable passband 25 MHz
- Unbalanced operation
- Impedance 50 Ω input and output
- Suitable for GPRS Class 1 to 12
- Ceramic Package for **Surface Mounted Technology (SMT)**

Chip sized SAW package DCS4F



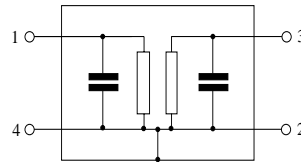
Terminals

- Ni, gold-plated

Dimensions in mm, approx. weight 0,007 g

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B9022	B39881-B9022-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}	5	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: $T = +25\text{ }^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

			min.	typ.	max.	
Center frequency	f_C		—	881,5	—	MHz
Maximum insertion attenuation	α_{\max}	869,0 ... 894,0 MHz	—	1,9	2,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$	869,0 ... 894,0 MHz	—	0,6	0,7	dB
Input VSWR		869,0 ... 894,0 MHz	—	1,7	2,0	
Output VSWR		869,0 ... 894,0 MHz	—	1,7	2,0	
Attenuation	α					
		0,0 ... 780,0 MHz	50	54	—	dB
		780,0 ... 840,0 MHz	42	50	—	dB
		840,0 ... 849,0 MHz	39	39	—	dB
		914,0 ... 950,0 MHz	28	30	—	dB
		950,0 ... 1500,0 MHz	45	52	—	dB
		1500,0 ... 2200,0 MHz	40	45	—	dB
		2200,0 ... 3000,0 MHz	33	38	—	dB
		3000,0 ... 4000,0 MHz	28	32	—	dB
		4000,0 ... 6000,0 MHz	15	21	—	dB



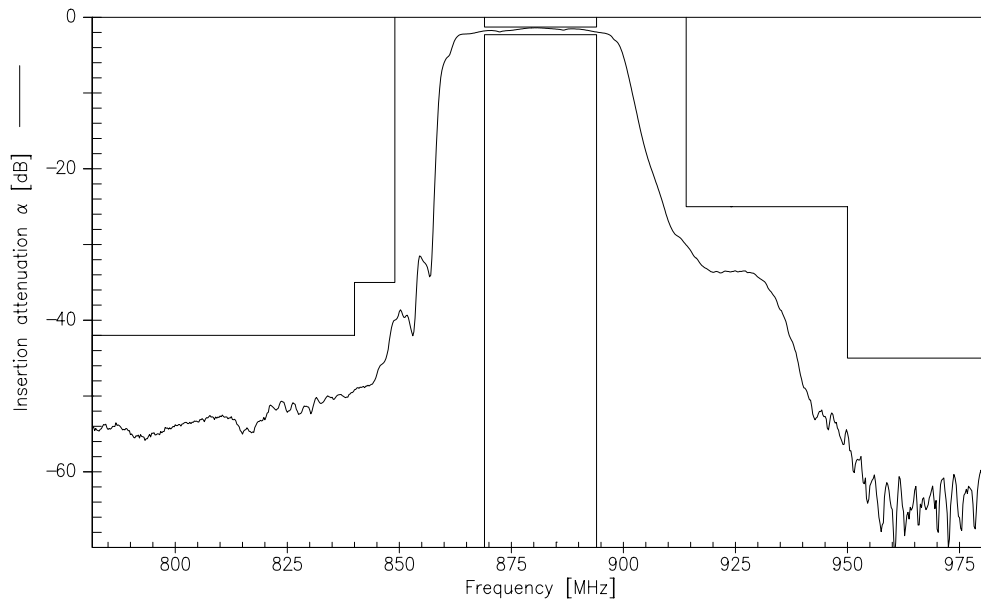
Characteristics

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

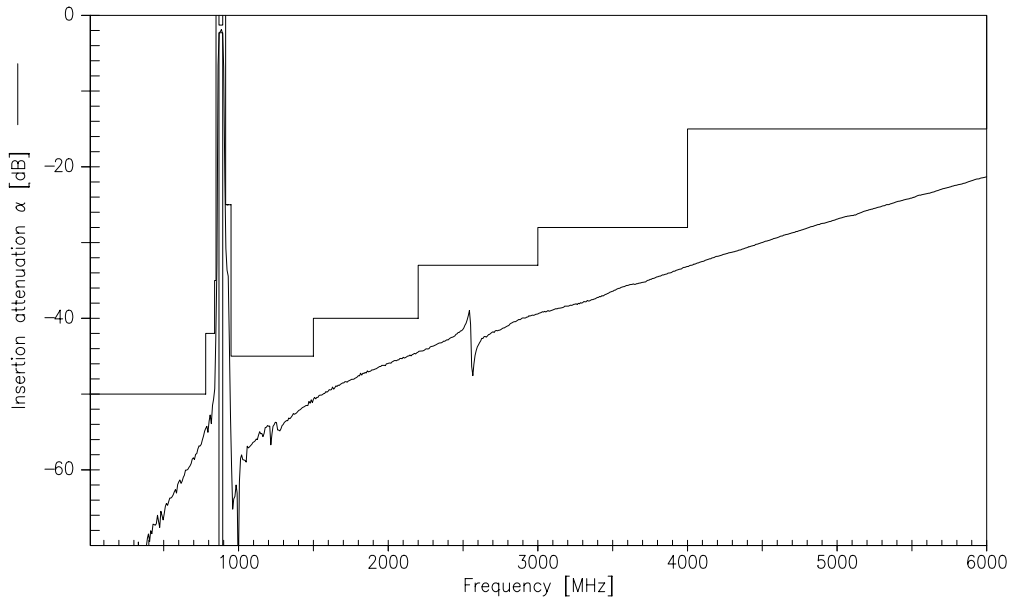
			min.	typ.	max.	
Center frequency	f_C		—	881,5	—	MHz
Maximum insertion attenuation	α_{max}	869,0 ... 894,0 MHz	—	2,0	2,3	dB
Amplitude ripple (p-p)	$\Delta\alpha$	869,0 ... 894,0 MHz	—	0,7	1,0	dB
Input VSWR		869,0 ... 894,0 MHz	—	1,7	2,0	
Output VSWR		869,0 ... 894,0 MHz	—	1,7	2,0	
Attenuation	α					
		0,0 ... 780,0 MHz	50	54	—	dB
		780,0 ... 840,0 MHz	42	50	—	dB
		840,0 ... 849,0 MHz	35	39	—	dB
		914,0 ... 950,0 MHz	25	28	—	dB
		950,0 ... 1500,0 MHz	45	52	—	dB
		1500,0 ... 2200,0 MHz	40	45	—	dB
		2200,0 ... 3000,0 MHz	33	38	—	dB
		3000,0 ... 4000,0 MHz	28	32	—	dB
		4000,0 ... 6000,0 MHz	15	21	—	dB



Transfer function (narrow band)



Transfer function (wideband)





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