



SAW Components

Data Sheet B9007





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B9007

Low-Loss Filter for Mobile Communication

1960,0 MHz

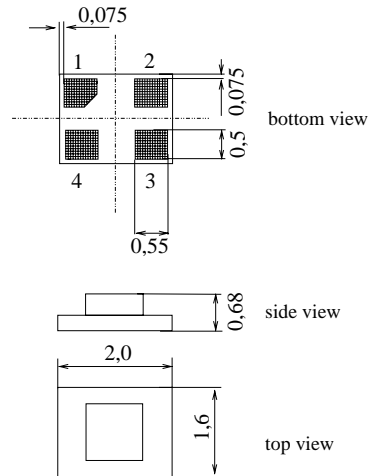
Data Sheet



Features

- Low-loss RF filter for mobile telephone PCS systems, receive path
- Usable passband 60 MHz
- No matching network required for operation at 50 Ohms
- Suitable for GPRS class 1 to 12
- Ceramic package for **Surface Mounted Technology (SMT)**

Chip sized SAW package DCS4F



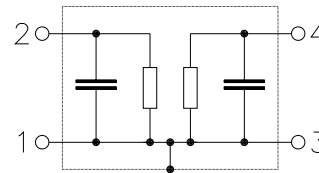
Terminals

- Ni, gold-plated

Dimensions in mm, approx. weight 0.006g

Pin configuration

- 1 Input
- 3 Output
- 2,4 Ground



Type	Ordering code	Marking and Package according to	Packing according to
B9007	B39202-B9007-E610	C61157-A7-A113	F61074-V8152_Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operating temperature range	T	- 30/+ 85	°C	
Storage temperature range	T_{stg}	- 40/+ 85	°C	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}	50	V	
Input Power at				
GSM850, GSM900	P_{IN}	15	dBm	peak power of GSM signal, duty cycle 4:8
GSM1800, GSM1900 Tx bands	P_{IN}	12	dBm	



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Characteristics

Operating temperature range: $T = +25\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

			min.	typ.	max.	
Center frequency	f_C		—	1960,0	—	MHz
Maximum insertion attenuation	α_{max}					
		1930,0 ... 1990,0 MHz	—	2,8	3,3	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
		1930,0 ... 1990,0 MHz	—	1,0	1,6	dB
Input return loss						
		1930,0 ... 1990,0 MHz	—	11	7	dB
Output return loss						
		1930,0 ... 1990,0 MHz	—	12	7	dB
Attenuation	α					
		0,0 ... 1700,0 MHz	30	41	—	dB
		1700,0 ... 1910,0 MHz	20	24	—	dB
		2050,0 ... 2400,0 MHz	22	26	—	dB
		2400,0 ... 4000,0 MHz	30	36	—	dB
		4000,0 ... 6000,0 MHz	22	29	—	dB



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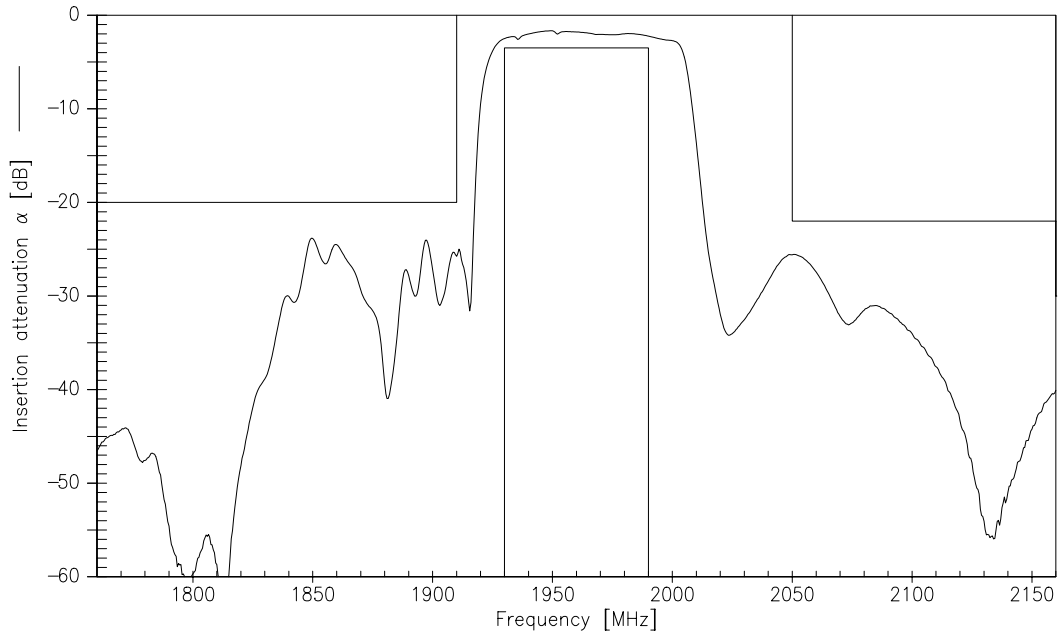
Characteristics

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

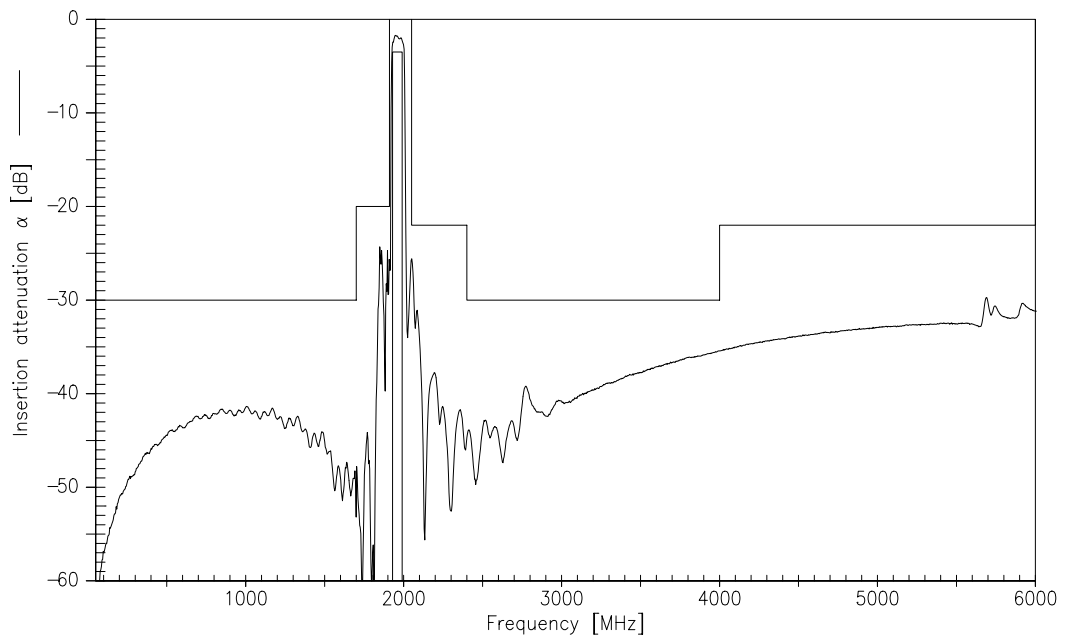
			min.	typ.	max.	
Center frequency	f_C		—	1960,0	—	MHz
Maximum insertion attenuation	α_{max}	1930,0 ... 1990,0 MHz	—	2,9	3,5	dB
Amplitude ripple (p-p)	$\Delta\alpha$	1930,0 ... 1990,0 MHz	—	1,2	1,8	dB
Input return loss		1930,0 ... 1990,0 MHz	—	9	7	dB
Output return loss		1930,0 ... 1990,0 MHz	—	10	7	dB
Attenuation	α					
		0,0 ... 1700,0 MHz	30	41	—	dB
		1700,0 ... 1910,0 MHz	20	24	—	dB
		2050,0 ... 2400,0 MHz	22	26	—	dB
		2400,0 ... 4000,0 MHz	30	36	—	dB
		4000,0 ... 6000,0 MHz	22	29	—	dB



Transfer function



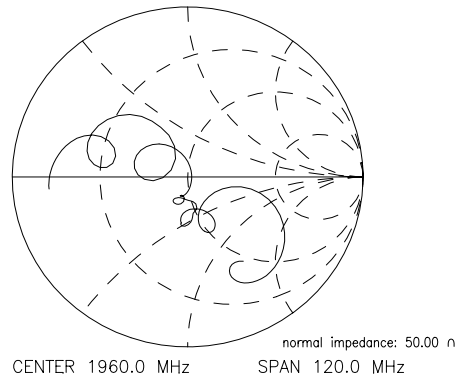
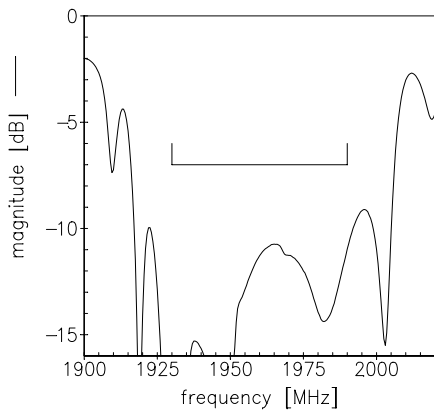
Transfer function (wide band)



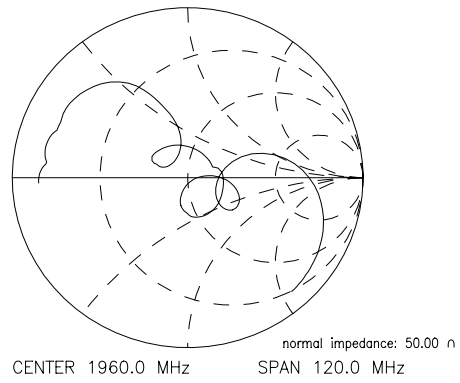
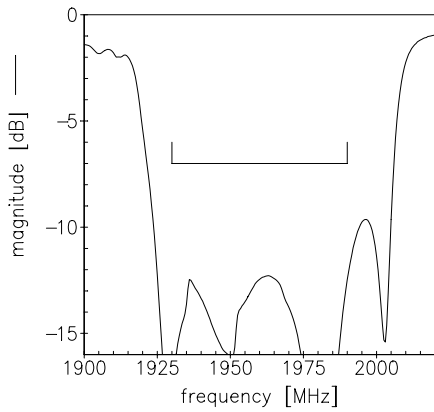


Reflection functions

S11



S22





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Published by EPCOS AG

Surface Acoustic Wave Components Division, SAW MC WT

P.O. Box 80 17 09, 81617 Munich, GERMANY

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