EPCOS

SAW Components

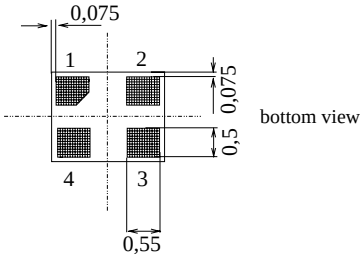
Data Sheet B9007

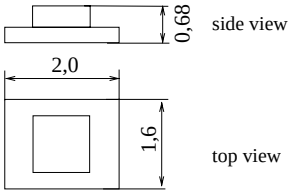
Data Sheet SMD

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 **S**urface **M**ounted **T**echnology (**SMT**)

Chip sized SAW package DCS4F





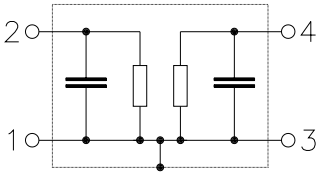
Dimensions in mm, approx. weight 0.006g

Terminals

- Ni, gold-plated

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 **S**ensitive **D**evice (**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,
GSM1800, GSM1900	P_{IN}	12	dBm	duty cycle 4:8
Tx bands				

Characteristics

Operating temperature range: T = +25 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

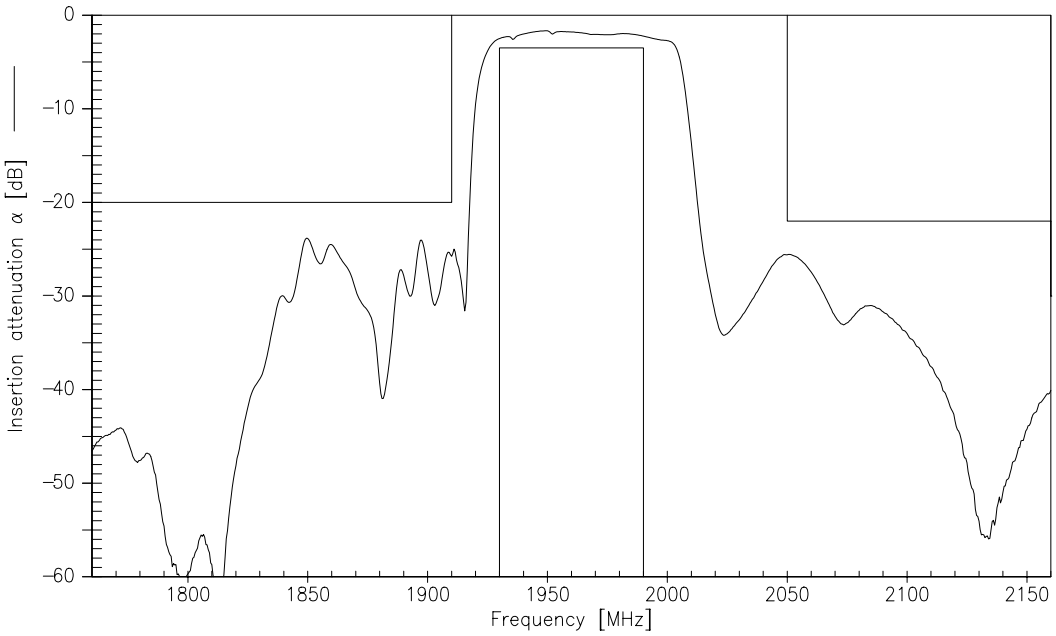
		min.	typ.	max.	
Center frequency	f_C	—	1960,0	—	MHz
Maximum insertion attenuation	α_{max}				
1930,0 ...1990,0 MHz		—	2,8	3,3	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1930,0 ...1990,0 MHz		—	1,0	1,6	dB
Input return loss					
1930,0 ...1990,0 MHz		—	11	7	dB
Output return loss					
1930,0 ...1990,0 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

Characteristics

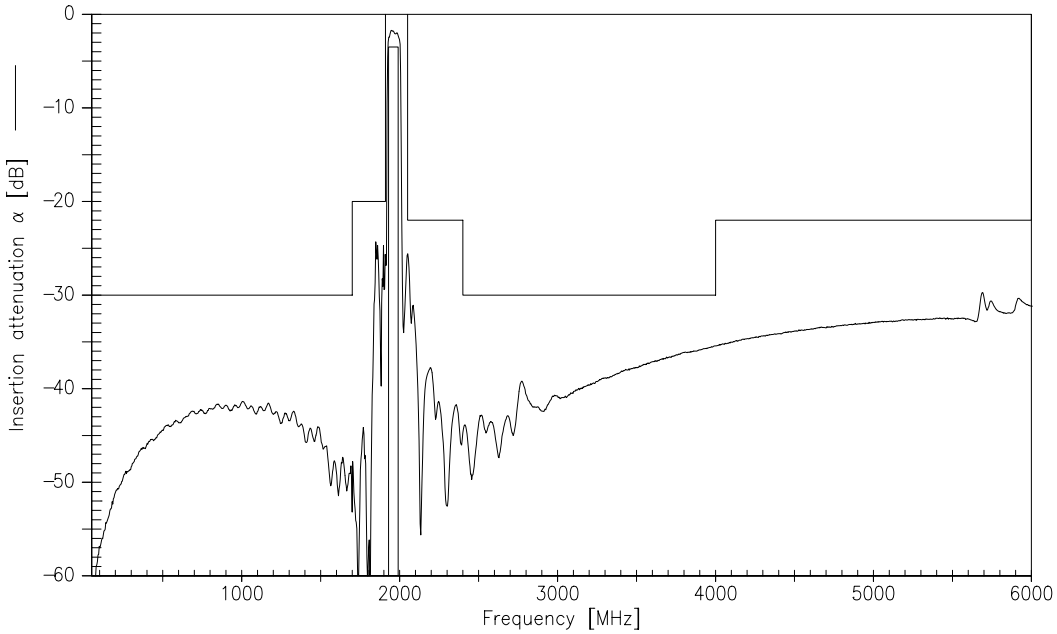
Operating temperature range: T = -30 to +85 ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

			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

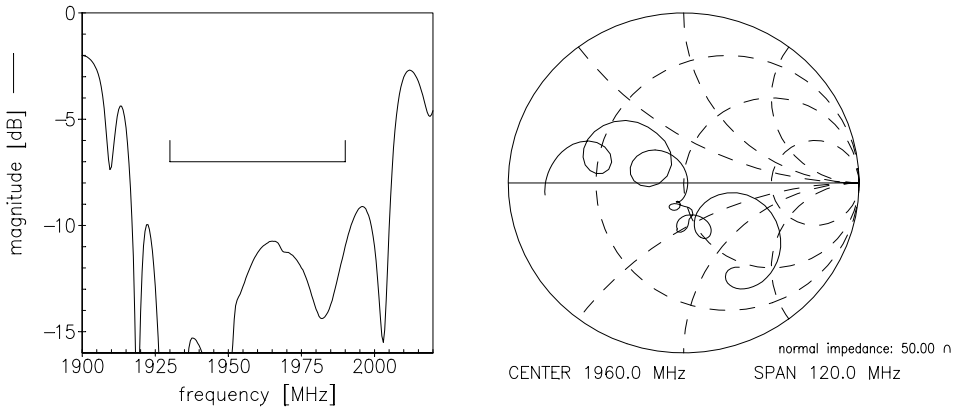


Transfer function (wide band)

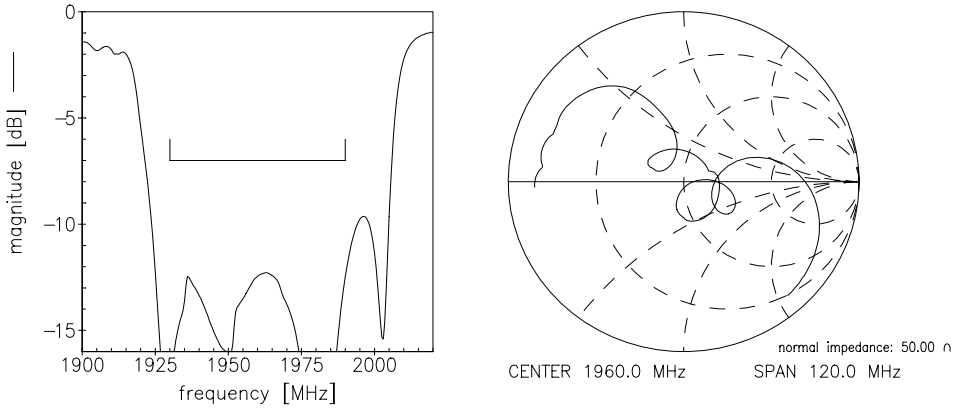


Reflection functions

S11



S22



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