EPCOS

SAW Components

Data Sheet B9025

Data Sheet SMD

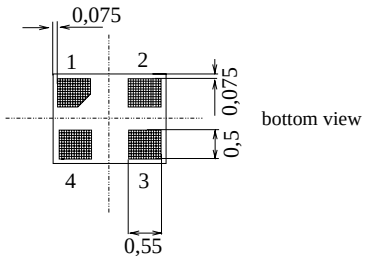
Features

- Low-loss RF filter for mobile telephone GSM850 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 **S**urface **M**ounted **T**echnology (**SMT**)

Terminals

- Ni, gold-plated

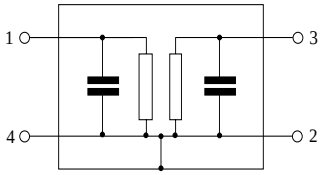
Chip sized SAW package DCS4F



Dimensions in mm, approx. weight 0,007 g

Pin configuration

1	Input
3	Output
2,4	Ground



Type	Ordering code	Marking and Package according to	Packing according to
B9025	B39881-B9025-E610	C61157-A7-A113	F61074-V8152-Z000

Electrostatic **S**ensitive **D**evice (**ESD**)

Maximum ratings

Operable temperature range	T	– 30/+ 85	˚C	
Storage temperature range	T_{stg}	– 40/+ 85	˚C	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}	100*	V	Machine Model, 10 pulses
Input power max at GSM850, GSM900 GSM1800, GSM1900 Tx bands	P_S	15	dBm	peak power of GSM signal, duty cycle 4:8

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

Characteristics

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

		min.	typ.	max.	
Center frequency	f_C	—	881,5	—	MHz
Maximum insertion attenuation	α_{max}				
869,0 ... 894,0 MHz		—	1,6	1,8	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
869,0 ... 894,0 MHz		—	0,5	0,7	dB
Input VSWR					
869,0 ... 894,0 MHz		—	1,7	2,0	
Output VSWR					
869,0 ... 894,0 MHz		—	1,8	2,1	
Attenuation	α				
0,0 ... 600,0 MHz		40	43	—	dB
600,0 ... 800,0 MHz		30	37	—	dB
800,0 ... 824,0 MHz		27	31	—	dB
824,0 ... 849,0 MHz		26	29	—	dB
914,0 ...1500,0 MHz		23	26	—	dB
1500,0 ...4500,0 MHz		35	44	—	dB
4500,0 ...6000,0 MHz		28	34	—	dB

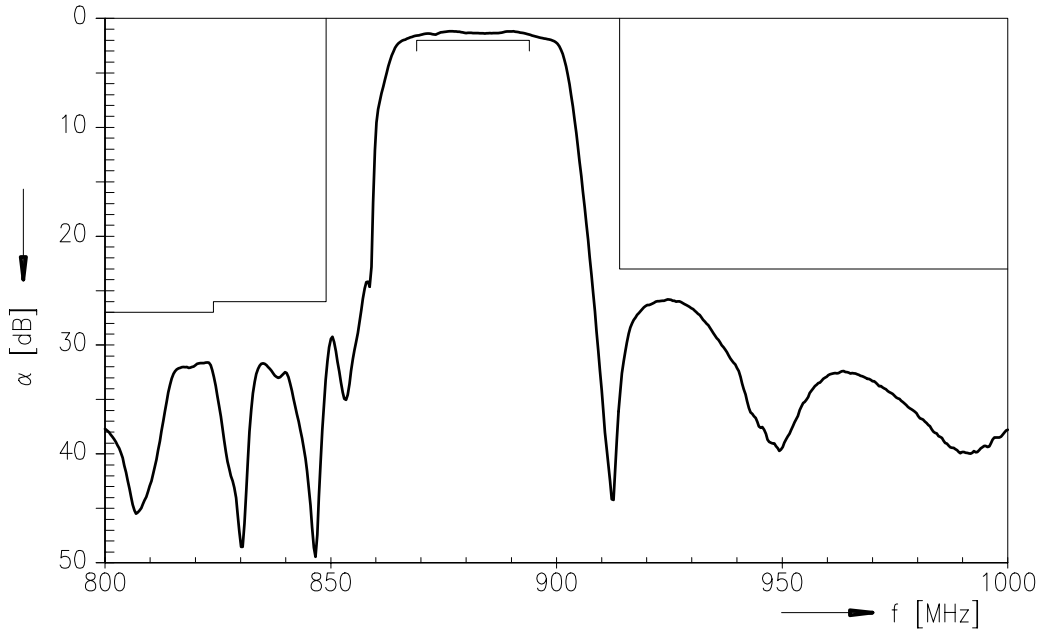
Characteristics

Operating temperature: T = -20 ... +75 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

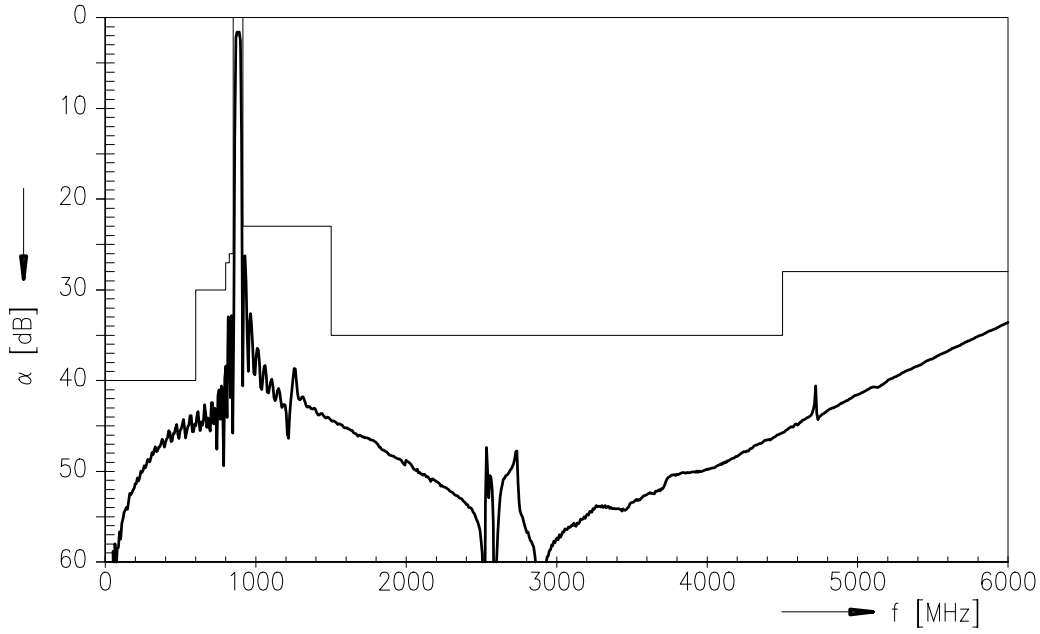
		min.	typ.	max.	
Center frequency	f_C	—	881,5	—	MHz
Maximum insertion attenuation	α_{max}				
869,0 ... 894,0 MHz		—	1,6	2,0[1)]	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
869,0 ... 894,0 MHz		—	0,5	0,9	dB
Input VSWR					
869,0 ... 894,0 MHz		—	1,7	2,0	
Output VSWR					
869,0 ... 894,0 MHz		—	1,8	2,1	
Attenuation	α				
0,0 ... 600,0 MHz		40	43	—	dB
600,0 ... 800,0 MHz		30	37	—	dB
800,0 ... 824,0 MHz		27	31	—	dB
824,0 ... 849,0 MHz		26	29	—	dB
914,0 ...1500,0 MHz		23	26	—	dB
1500,0 ...4500,0 MHz		35	44	—	dB
4500,0 ...6000,0 MHz		28	34	—	dB

1) Maximum insertion attenuation from -30 to +85 °C is 2.1 dB

Transfer function (narrowband; 50 Ω to 50 Ω operation)



Transfer function (wideband; 50 Ω to 50 Ω operation)



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