EPCOS

SAW Components

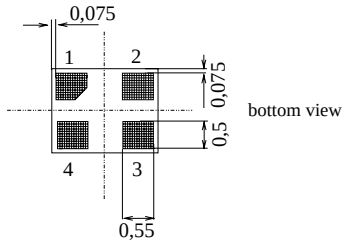
Data Sheet B9024

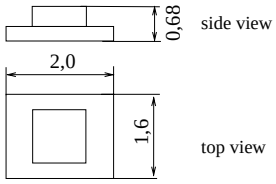
Data Sheet SMD

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

Chip sized SAW package DCS4F





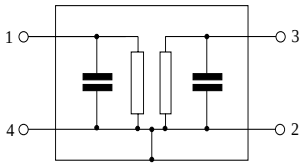
Dimensions in mm, approx. weight 6 mg

Terminals

- Ni, gold-plated

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 **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}	3	V	
ESD voltage	V_{ESD} *	100*	V	machine model, 10 pulses
Input power at GSM850, GSM900 GSM1800 and GSM1900 Tx bands	P_{IN}	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 ... +75 ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

			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

Characteristics

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

			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)	$\Delta\alpha$					
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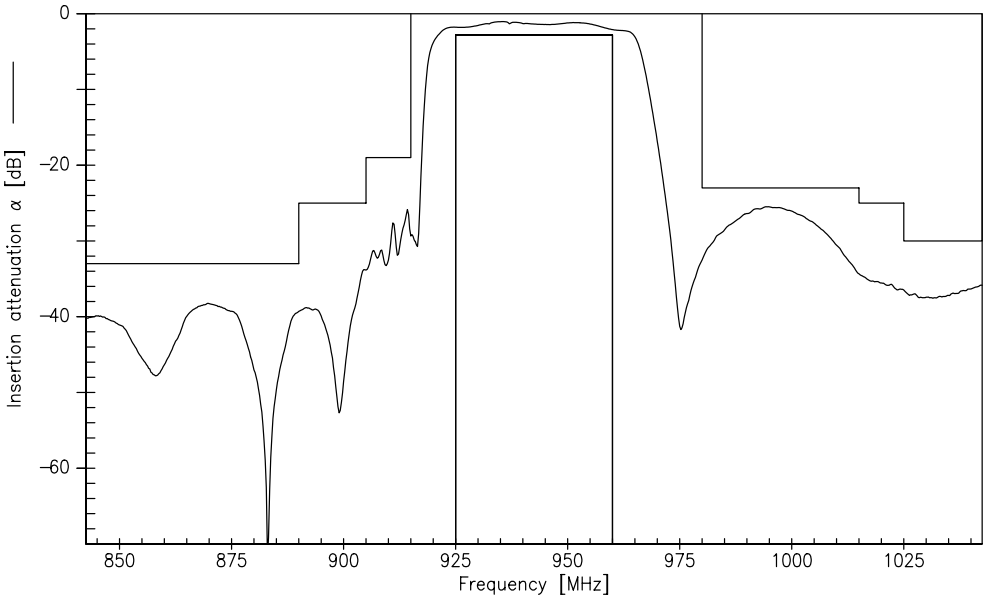
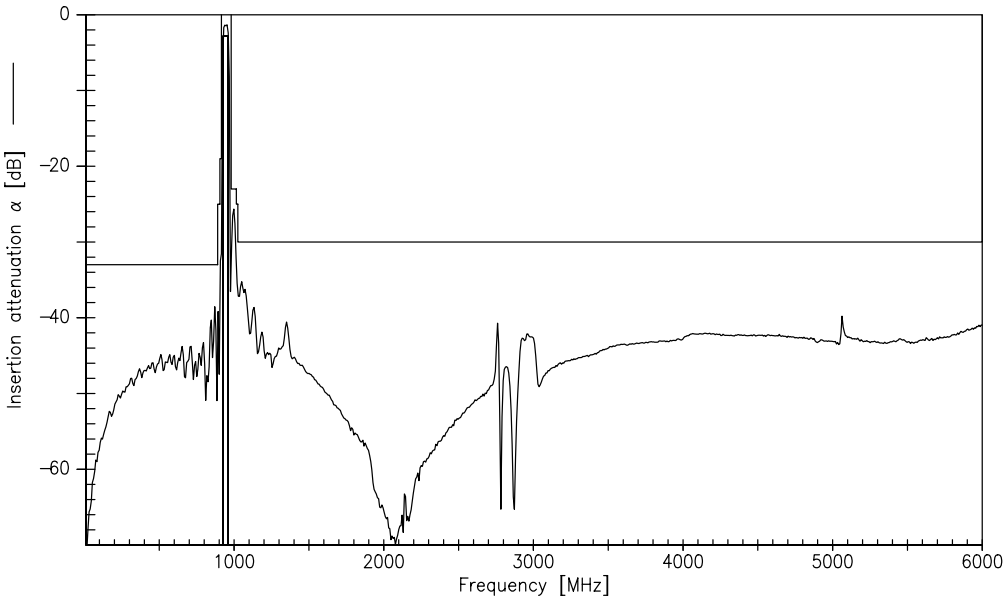
Output VSWR						
925,0 ... 960,0	MHz		—	2,2	2,4	
Attenuation	α					
0,0 ... 890,0	MHz		33	38	—	dB
890,0 ... 905,0	MHz		25	31	—	dB
905,0 ... 915,0	MHz		19	26	—	dB
980,0 ...1015,0	MHz		23	25	—	dB
1015,0 ...1025,0	MHz		25	32	—	dB
1025,0 ...2500,0	MHz		30	35	—	dB
2500,0 ...6000,0	MHz		30	42	—	dB

Transfer function (measurement)



Transfer function (wideband measurement)



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