



SAW Components

Data Sheet B9026

Data Sheet

An abstract graphic featuring the word "EPCOS" in large, glowing, 3D letters. The letters are white with a blue glow and are positioned diagonally across the frame. In the background, there is a faint, stylized globe with circuitry patterns, suggesting a global network or technological theme. The overall color scheme is dark with blue and white highlights.



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Low-Loss Filter for Mobile Communication

1950,0 MHz

Data Sheet



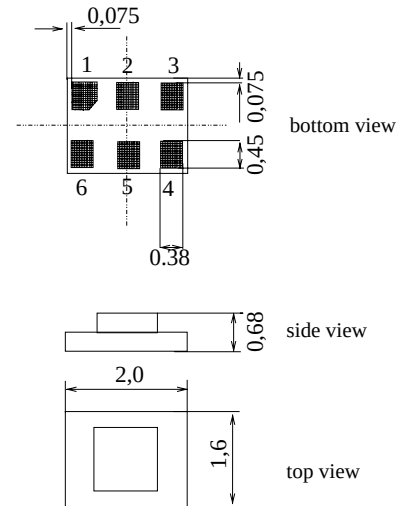
Chip sized SAW package **DCS6T**

Features

- Low-loss RF filter for mobile telephone W-CDMA system, transmit path
- Low amplitude ripple
- Usable passband 60 MHz
- Balanced to unbalanced operation
- Impedance transformation from 200 Ω to 50 Ω
- Package for **Surface Mounted Technology (SMT)**
- Pb-free

Terminals

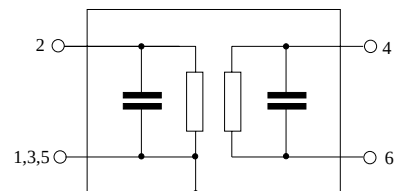
- Gold-plated Ni



Dimensions in mm, approx. weight 0,006 g

Pin configuration

- | | |
|---------|--------------------|
| 4, 6 | Input, balanced |
| 2 | Output, unbalanced |
| 1, 3, 5 | To be grounded |



Type	Ordering code	Marking and Package according to	Packing according to
B9026	B39202-B9026-K310	C61157-A7-A128	F61074-V8152-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 30/+ 85	$^{\circ}\text{C}$	Machine Model, 10 pulses continuous wave
Storage temperature range	T_{stg}	- 40/+ 85	$^{\circ}\text{C}$	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}	50*	V	
Input power	P_{IN}	10	dBm	

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



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Characteristics

Operating temperature range: $T = +25^{\circ}\text{C}$
Terminating source impedance: $Z_S = 200\ \Omega$ (balanced) || 33 nH
Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ.	max.	
Center frequency	f_C	—	1950,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$	—	2,6	3,0	dB
	1920,0 ... 1980,0 MHz	—	2,6	3,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,8	1,1	dB
	1920,0 ... 1980,0 MHz	—	0,8	1,1	dB
Amplitude ripple per 5MHz channel (p-p)	$\Delta\alpha_{5\text{MHz}}$	—	0,25	0,5	dB
	1920,0 ... 1980,0 MHz	—	0,25	0,5	dB
Input VSWR		—	1,8	2,0	
	1920,0 ... 1980,0 MHz	—	1,8	2,0	
Output VSWR		—	1,8	2,0	
	1920,0 ... 1980,0 MHz	—	1,8	2,0	
Input amplitude balance (S_{31}/S_{21})		-1,0	0	1,0	dB
	1920,0 ... 1980,0 MHz	-1,0	0	1,0	dB
Input phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^{\circ}$)		-10	0	10	degree
	1920,0 ... 1980,0 MHz	-10	0	10	degree
Attenuation	α				
	50,0 ... 1000,0 MHz	45	55	—	
	1000,0 ... 1795,0 MHz	40	44	—	dB
	1795,0 ... 1805,0 MHz	30	44	—	dB
	1805,0 ... 1880,0 MHz	30	36	—	dB
	2110,0 ... 2170,0 MHz	35	41	—	dB
	2170,0 ... 2800,0 MHz	35	42	—	dB
	2800,0 ... 6000,0 MHz	40	50	—	dB



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Characteristics

Operating temperature range: $T = -20$ to $+85$ °C
Terminating source impedance: $Z_S = 200 \Omega$ (balanced) || 33 nH
Terminating load impedance: $Z_L = 50 \Omega$

		min.	typ.	max.	
Center frequency	f_C	—	1950,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$	—	2,7	3,2	dB
1920,0 ... 1980,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	1,0	1,2	dB
1920,0 ... 1980,0 MHz					
Amplitude ripple per 5MHz channel (p-p)	$\Delta\alpha_{5\text{MHz}}$	—	0,3	0,5	dB
1920,0 ... 1980,0 MHz					
Input VSWR		—	1,8	2,0	
1920,0 ... 1980,0 MHz					
Output VSWR		—	1,8	2,0	
1920,0 ... 1980,0 MHz					
Input amplitude balance (S_{31}/S_{21})		-1,0	0	1,0	dB
1920,0 ... 1980,0 MHz					
Input phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^\circ$)		-10	0	10	degree
1920,0 ... 1980,0 MHz					
Attenuation	α				
50,0 ... 1000,0 MHz		45	55	—	
1000,0 ... 1795,0 MHz		40	44	—	dB
1795,0 ... 1805,0 MHz		30	44	—	dB
1805,0 ... 1880,0 MHz		30	33	—	dB
2110,0 ... 2170,0 MHz		35	40	—	dB
2170,0 ... 2800,0 MHz		35	43	—	dB
2800,0 ... 6000,0 MHz		40	50	—	dB



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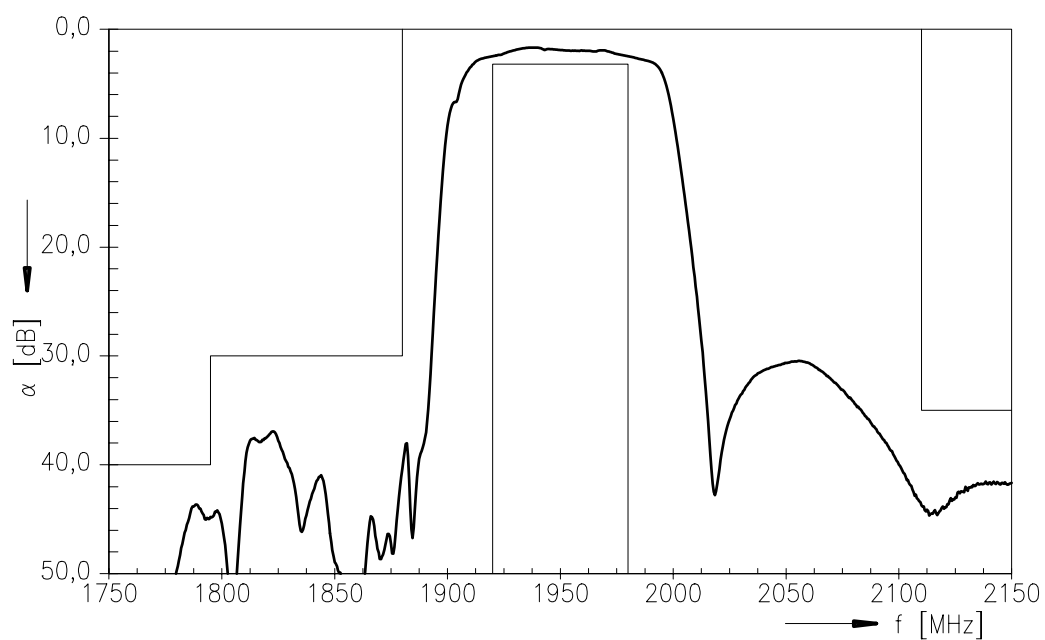
Low-Loss Filter for Mobile Communication

1950,0 MHz

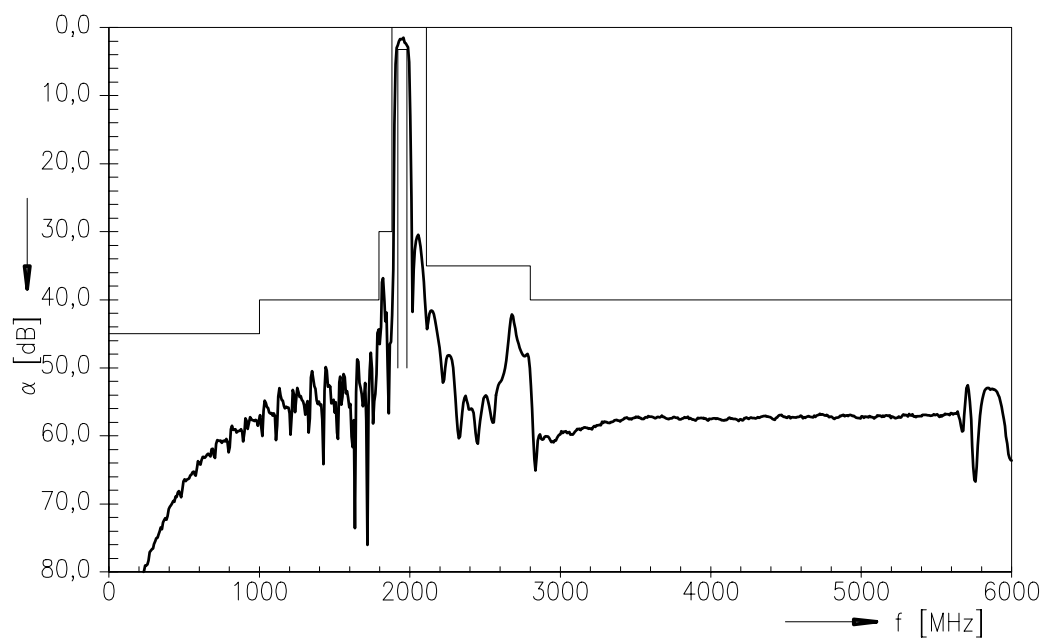
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Transfer function (narrow band):

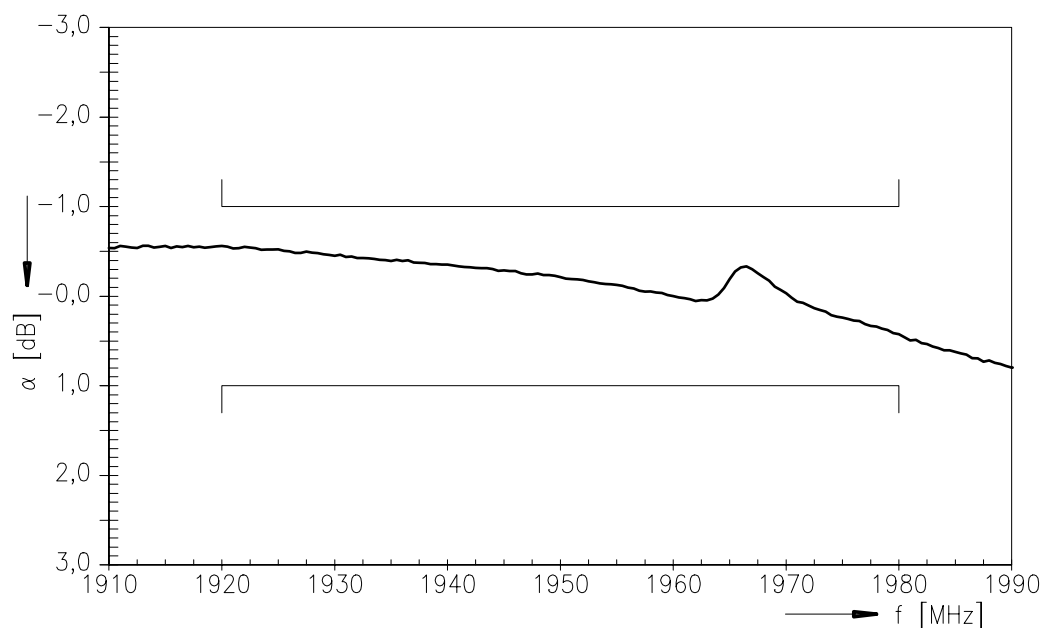


Transfer function (wide band):

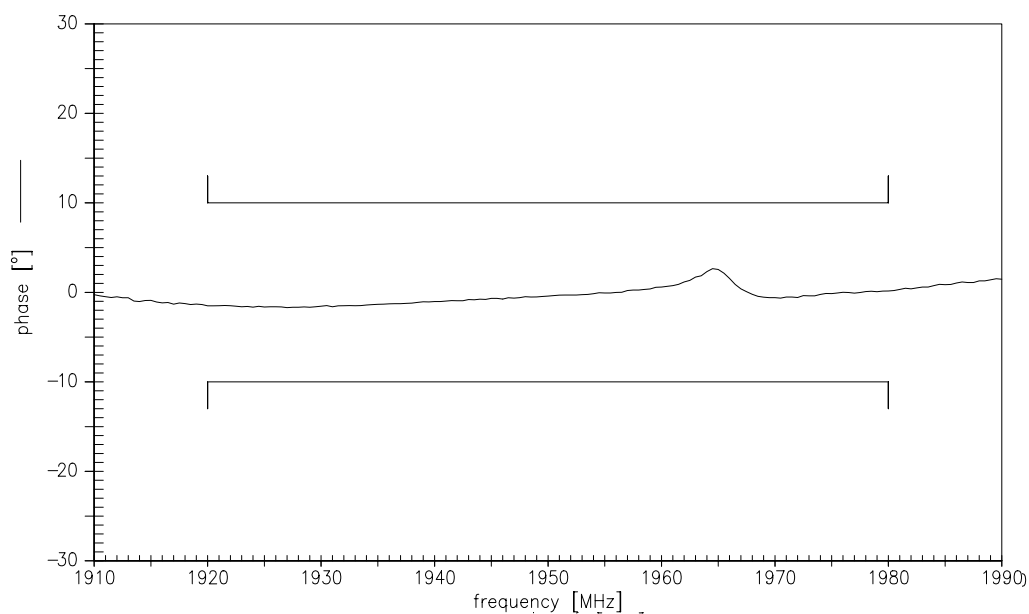




Input amplitude balance ($|S_{31}/S_{21}|$):



Input phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^\circ$):





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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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