



SAW Components

Data Sheet B9031

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



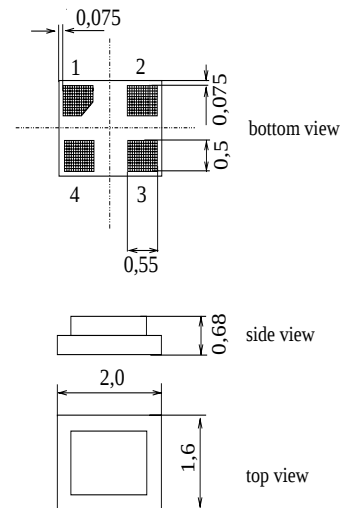
Chip sized SAW package DCS4G

Features

- Low-loss RF filter for W-CDMA mobile telephone system, transmit path
- High stopband attenuation
- Usable passband 60 MHz
- Unbalanced/unbalanced operation
- Package size: 2 mm x 1.6 mm (4 pin, diagonal pinning)

Terminals

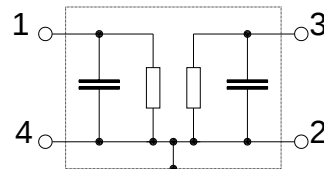
- Ni, gold-plated



Dimensions in mm, approx weight 0,007g

Pin configuration

1	Input
3	Output
2,4	Ground



Type	Ordering code	Marking and Package according to	Packing according to
B9031	B39202-B9031-E910	C61157-A7-A105	F61074-V8152-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 40/+ 85	°C	Machine Model, 10 pulses source impedance 50 Ω
Storage temperature range	T_{stg}	- 40/+ 85	°C	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}	50*	V	
Input power	P_S	10	dBm	

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



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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	—	1950,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
	1920,0 ... 1980,0 MHz	—	1,8	2,2	dB
Ripple	p-p				
	1920,0 ... 1980,0 MHz	—	0,8	1,1	dB
Input VSWR					
	1920,0 ... 1980,0 MHz	—	1,7	2,1	
Output VSWR					
	1920,0 ... 1980,0 MHz	—	1,7	2,1	
Attenuation	α				
	0,0 ... 1670,0 MHz	26	31	—	dB
	1670,0 ... 1720,0 MHz	29	34	—	dB
	1720,0 ... 1750,0 MHz	30	36	—	dB
	1750,0 ... 1880,0 MHz	31	35	—	dB
	2025,0 ... 2050,0 MHz	35	46	—	dB
	2110,0 ... 2170,0 MHz	35	39	—	dB
	2300,0 ... 2490,0 MHz	34	38	—	dB
	2490,0 ... 2740,0 MHz	35	40	—	dB
	2740,0 ... 3960,0 MHz	30	36	—	dB
	3960,0 ... 6000,0 MHz	20	28	—	dB



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Characteristics

Operating temperature range: $T = -20$ to $+85$ °C
Terminating source impedance: $Z_S = 50 \Omega$
Terminating load impedance: $Z_L = 50 \Omega$

		min.	typ.	max.	
Center frequency	f_C	—	1950,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
	1920,0 ... 1980,0 MHz	—	1,8	2,5	dB
Ripple	p-p				
	1920,0 ... 1980,0 MHz	—	0,8	1,4	dB
Input VSWR					
	1920,0 ... 1980,0 MHz	—	1,7	2,2	
Output VSWR					
	1920,0 ... 1980,0 MHz	—	1,7	2,2	
Attenuation	α				
	0,0 ... 1670,0 MHz	26	31	—	dB
	1670,0 ... 1720,0 MHz	29	34	—	dB
	1720,0 ... 1750,0 MHz	30	36	—	dB
	1750,0 ... 1880,0 MHz	31	35	—	dB
	2025,0 ... 2050,0 MHz	35	46	—	dB
	2110,0 ... 2170,0 MHz	35	39	—	dB
	2300,0 ... 2490,0 MHz	34	38	—	dB
	2490,0 ... 2740,0 MHz	35	40	—	dB
	2740,0 ... 3960,0 MHz	30	36	—	dB
	3960,0 ... 6000,0 MHz	20	28	—	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	—	1950,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
	1920,0 ... 1980,0 MHz	—	1,8	2,7	dB
Ripple	p-p				
	1920,0 ... 1980,0 MHz	—	0,8	1,6	dB
Input VSWR					
	1920,0 ... 1980,0 MHz	—	1,7	2,2	
Output VSWR					
	1920,0 ... 1980,0 MHz	—	1,7	2,2	
Attenuation	α				
	0,0 ... 1670,0 MHz	26	31	—	dB
	1670,0 ... 1720,0 MHz	29	34	—	dB
	1720,0 ... 1750,0 MHz	30	36	—	dB
	1750,0 ... 1880,0 MHz	31	35	—	dB
	2025,0 ... 2050,0 MHz	35	46	—	dB
	2110,0 ... 2170,0 MHz	35	39	—	dB
	2300,0 ... 2490,0 MHz	34	38	—	dB
	2490,0 ... 2740,0 MHz	35	40	—	dB
	2740,0 ... 3960,0 MHz	30	36	—	dB
	3960,0 ... 6000,0 MHz	20	28	—	dB



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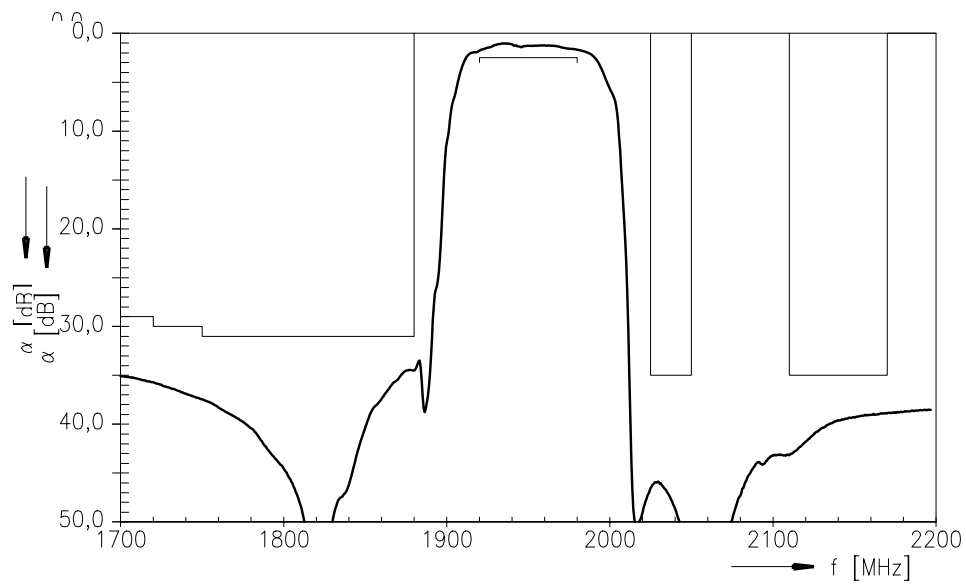
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1950,0 MHz

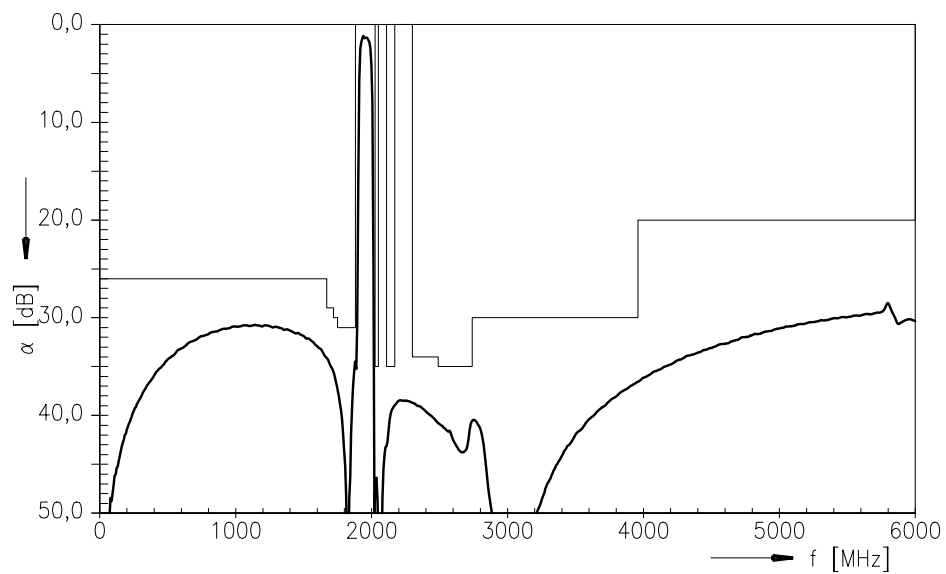
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Transfer function (measured at room temperature):



Transfer function (wideband, measured at room temperature):





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