



SAW Components

Datasheet B9014

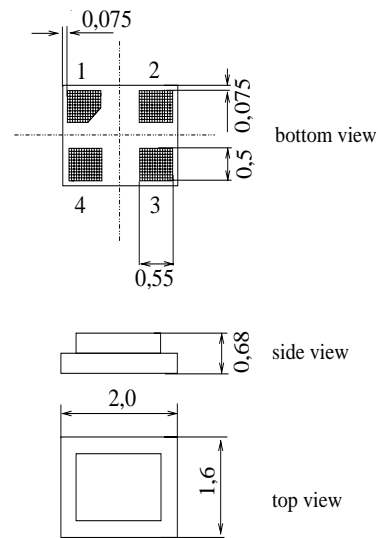




Chip Sized SAW Package DCS4G

Features

- Low-loss RF filter for mobile telephone PCS systems, transmit path
- High selectivity
- Usable passband 60 MHz
- Unbalanced to unbalanced operation
- No external matching required
- Package for **Surface Mounted Technology (SMT)**



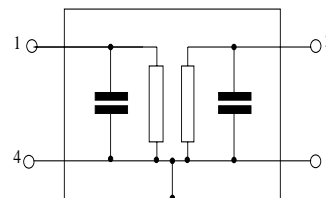
Dimensions in mm, approx weight 0,007g

Terminals

- Gold-plated Ni

Pin configuration

- 1 Input
- 3 Output
- 2, 4 To be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B9014	B39192-B9014-E910	C61157-A7-A105	F61074-V8152-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 30 /+ 85	°C	source impedance 50 Ω
Storage temperature range	T_{stg}	- 40 /+ 85	°C	
Input Power max.	P_{IN}	15	dBm	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}^*	50*	V	machine model, 10 pulses

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



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Low-Loss Filter for Mobile Communication

1880,0 MHz

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Characteristics

Operating Temperature Range: $T = 25 \pm 2^\circ\text{C}$
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 50 \Omega$

		min.	typ.	max.	
Center frequency	f_C	—	1880,0	—	MHz
Maximum insertion attenuation 1850,0 ... 1910,0MHz	α_{\max}	—	2,3	2,9	dB
Amplitude ripple (p-p) 1850,0 ... 1910,0MHz	$\Delta\alpha$	—	0,9	1,5	dB
Attenuation	α				
DC ... 1550,0MHz		32	34	—	dB
1550,0 ... 1580,0MHz		35	39	—	dB
1580,0 ... 1770,0MHz		30	35	—	dB
1770,0 ... 1830,0MHz		21	24	—	dB
1930,0 ... 1990,0MHz		35	45 ¹⁾	—	dB
1990,0 ... 2032,0MHz		35	41	—	dB
2032,0 ... 2500,0MHz		35	42	—	dB
2500,0 ... 3820,0MHz		25	28	—	dB
3820,0 ... 6000,0MHz		15	19	—	dB
Input return loss 1850,0 ... 1910,0MHz		8	10	—	dB
Output return loss 1850,0 .. 1910,0MHz		8	10	—	dB

¹⁾ Valid for frequencies from 1935 MHz to 1990 MHz



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Characteristics

Operating Temperature Range: $T = -30$ to $+85^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ.	max.	
Center frequency	f_C	—	1880,0	—	MHz
Maximum insertion attenuation 1850,625 ... 1909,375MHz	α_{\max}	—	3,3 ¹⁾	3,9 ¹⁾	dB
Amplitude ripple (p-p) 1850,625 ... 1909,375MHz	$\Delta\alpha$	—	2,0	2,5	dB
Attenuation	α				
DC ... 1550,0MHz		32	34	—	dB
1550,0 ... 1580,0MHz		35	39	—	dB
1580,0 ... 1770,0MHz		30	35	—	dB
1770,0 ... 1830,0MHz		14	20	—	dB
1930,625 ... 1989,375MHz		32	45 ²⁾	—	dB
1990,0 ... 2032,0MHz		35	41	—	dB
2032,0 ... 2500,0MHz		35	42	—	dB
2500,0 ... 3820,0MHz		25	28	—	dB
3820,0 ... 6000,0MHz		15	19	—	dB
Input return loss 1850,625 ... 1909,375MHz		7	10	—	dB
Output return loss 1850,625 ... 1909,375MHz		7	10	—	dB

¹⁾ Valid in temperature range -30°C to $+75^{\circ}\text{C}$. Guaranteed for $+85^{\circ}\text{C}$: 4,2dB

²⁾ Valid for frequencies from 1935 MHz to 1990 MHz



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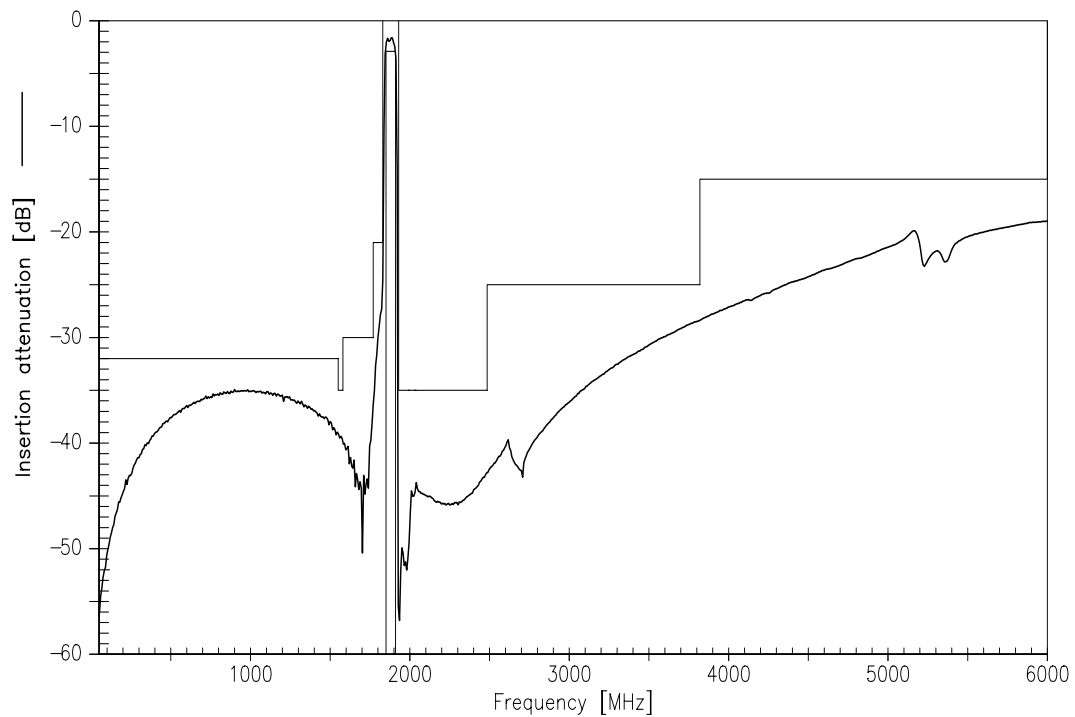
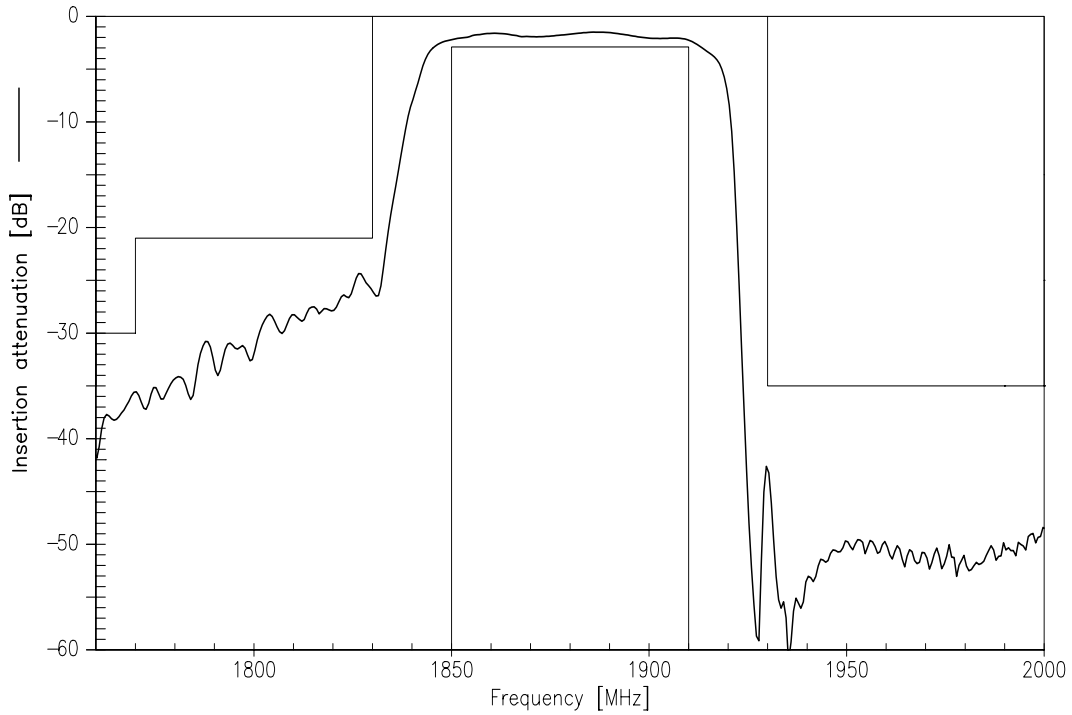
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Transfer Function (Specification for T=25° C)





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