EPCOS

SAW Components

Datasheet B9014

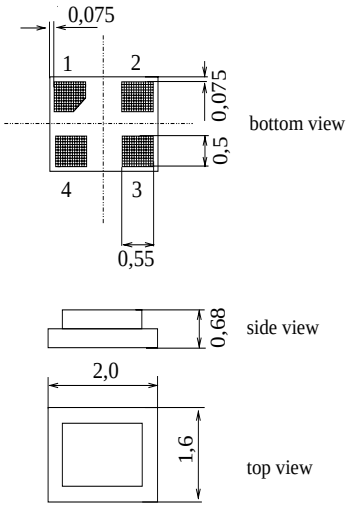
Datasheet

SMD

Chip **S**ized **S**AW **P**ackage **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 **S**urface **M**ounted **T**echnology (**SMT**)



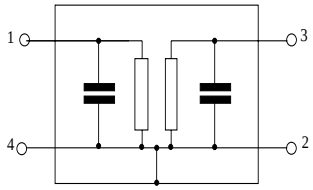
Dimensions in mm, approx weight 0,007g

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

Maximum ratings

Operable temperature range	T	– 30 /+ 85	˚C	
Storage temperature range	T_{stg}	– 40 /+ 85	˚C	
Input Power max.	P_{IN}	15	dBm	source impedance 50 Ω
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

Datasheet SMD

Characteristics

Operating Temperature Range: T = 25 ± 2°C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Center frequency	f_C	—	1880,0	—	MHz
Maximum insertion attenuation	α_{max}				
1850,0 ... 1910,0MHz		—	2,3	2,9	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1850,0 ... 1910,0MHz		—	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

Datasheet SMD

Characteristics

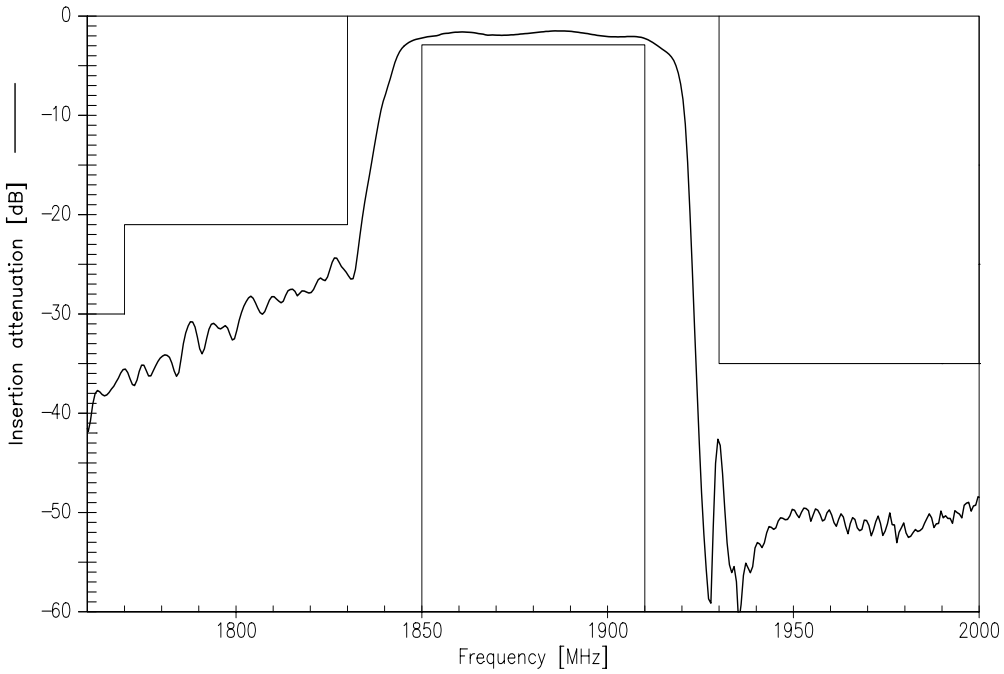
Operating Temperature Range: T = -30 to +85˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

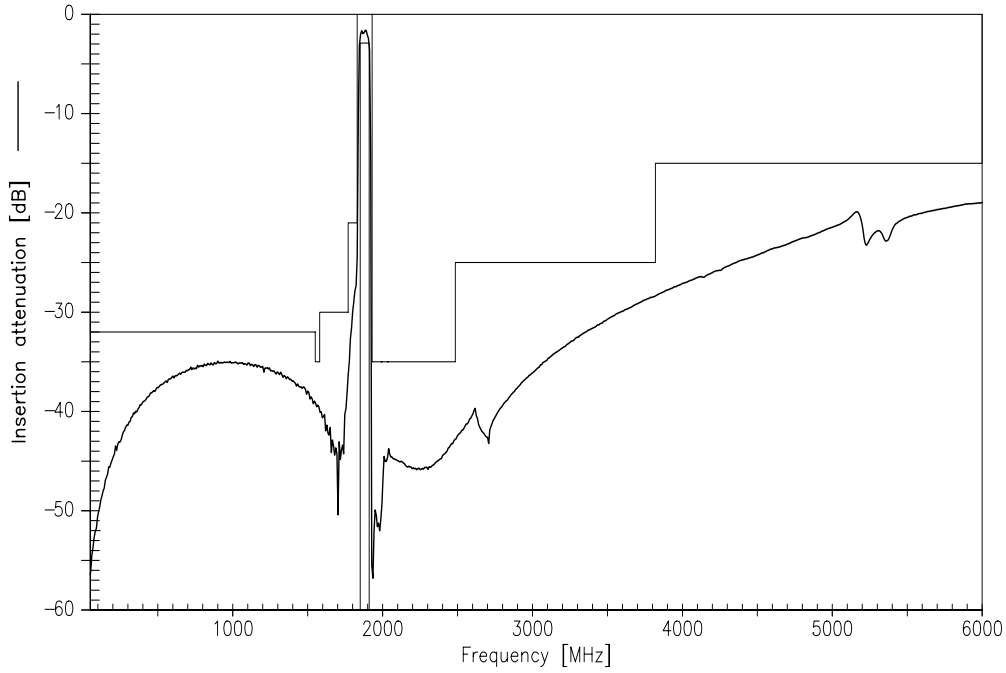
		min.	typ.	max.	
Center frequency	f_C	—	1880,0	—	MHz
Maximum insertion attenuation	α_{max}				
1850,625 ... 1909,375MHz		—	3,3 [1]	3,9 [1]	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1850,625 ... 1909,375MHz		—	2,0	2,5	dB
Attenuation	α				
DC ... 1550,0MHz		32	34	—	dB
1550,0 ... 1580,0MHz		35	39	—	dB
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˚C. Guaranteed for +85˚C: 4,2dB

[2] Valid for frequencies from 1935 MHz to 1990 MHz

Transfer Function (Specification for T=25°C)





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This brochure replaces the previous edition.

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