EPCOS

SAW Components

Datasheet B9014

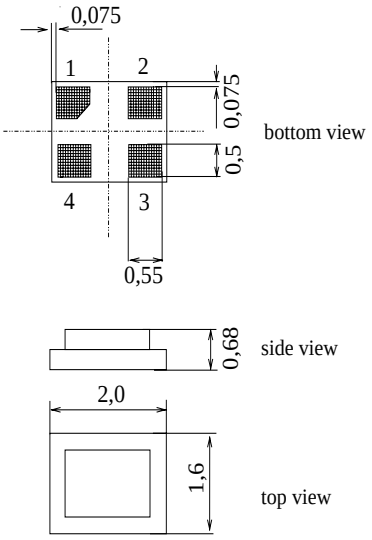


Datasheet

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**)



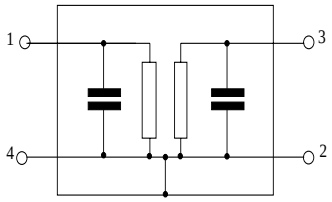
Dimensions in mm, approx weight 0,007g

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

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

Characteristics

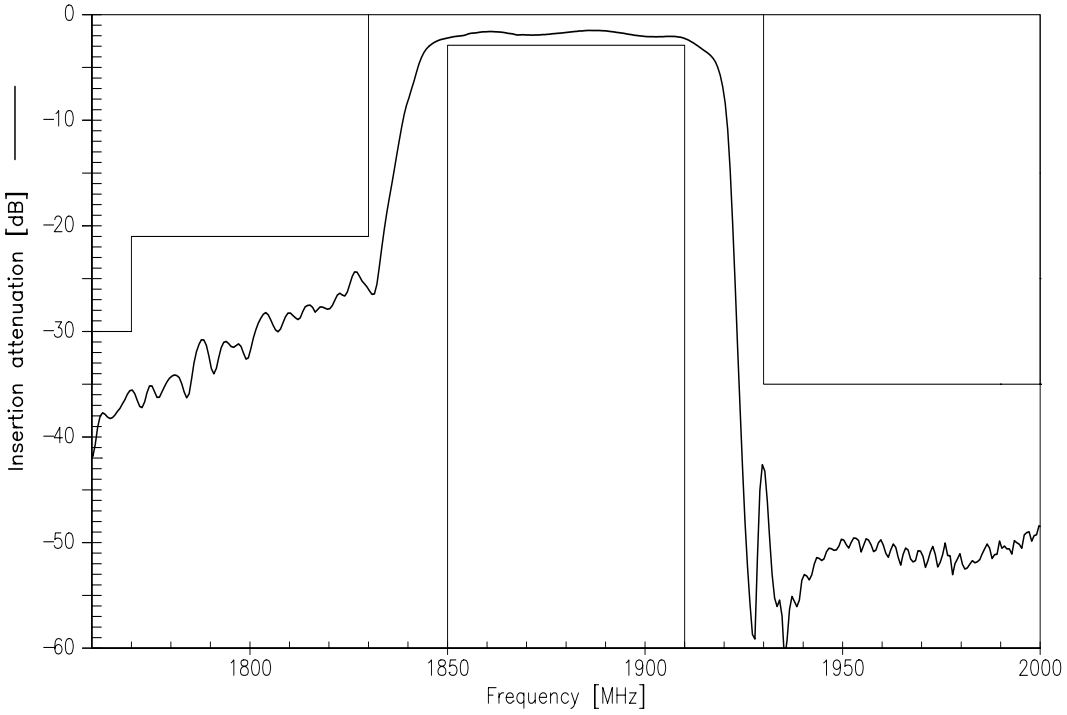
Operating Temperature Range: T = -30 to +85˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

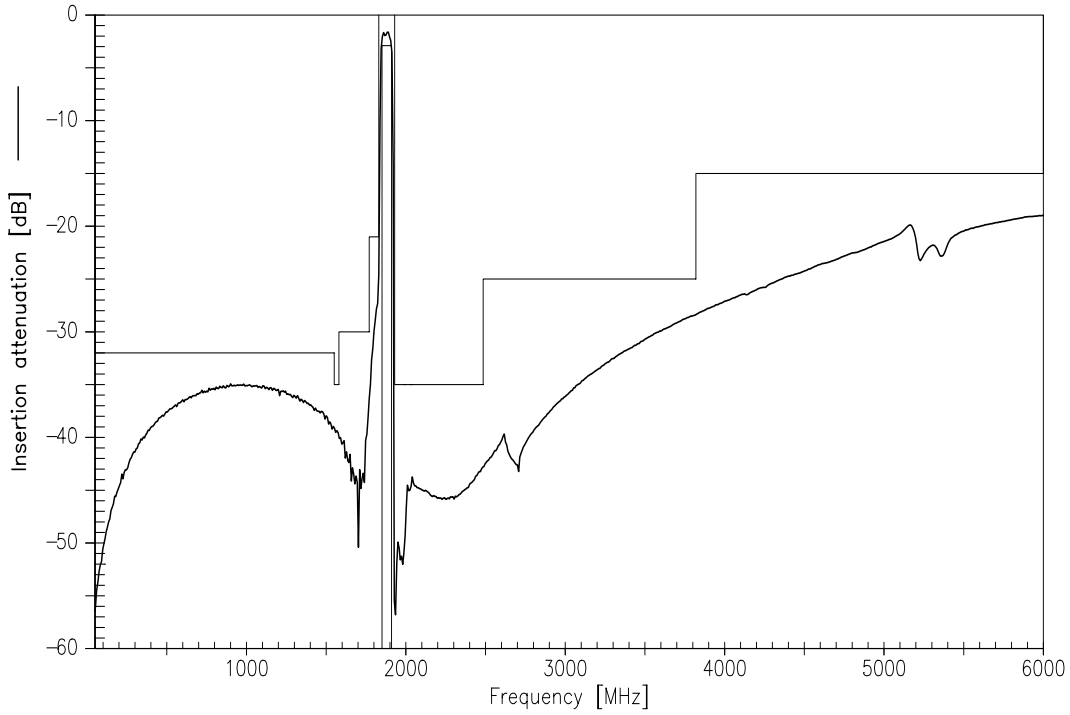
		min.	typ.	max.	
Center frequency	f_C	—	1880,0	—	MHz
Maximum insertion attenuation	α_{max}				
1850,625 ... 1909,375MHz		—	3,3 [1]	3,9 [1]	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1850,625 ... 1909,375MHz		—	2,0	2,5	dB
Attenuation	α				
DC ... 1550,0MHz		32	34	—	dB
1550,0 ... 1580,0MHz		35	39	—	dB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





Published by EPCOS AG
Surface Acoustic Wave Components Division, SAW MC WT
P.O. Box 80 17 09, D-81617 München

© EPCOS AG 2004. All Rights Reserved. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

The information contained in this brochure describes the type of component and shall not be considered as guaranteed characteristics. Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.