EPCOS

SAW Components

Data Sheet B9005

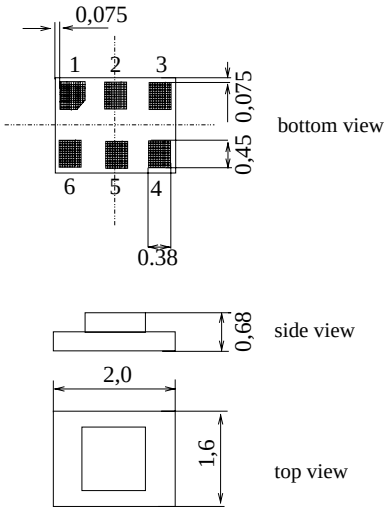
Chip sized SAW package **DCS6R**

Features

- Low-loss RF filter for W-CDMA mobile telephone system, receive path
- Balanced to balanced operation
- Usable passband 60 MHz

Terminals

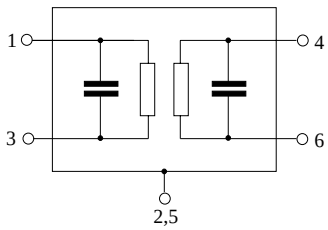
- Ni, gold-plated



Dimensions in mm, approx. weight 0,007g

Pin configuration

1, 3	Balanced input
4, 6	Balanced output
2, 5	Case ground



Type	Ordering code	Marking and Package according to	Packing according to
B9005	B39212-B9005-E810	C61157-A7-A114	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	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}	50*	V	Machine Model, 10 pulses
Input power max at				
GSM850, GSM900	P_S	15	dBm	peak power of GSM signal,
GSM1800, GSM1900	P_S	12	dBm	duty cycle 4:8
Tx bands				

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

Characteristics

Reference temperature: T = 25 °C
Terminating source impedance: Z_S = 100 Ω
Terminating load impedance: Z_L = 100 Ω

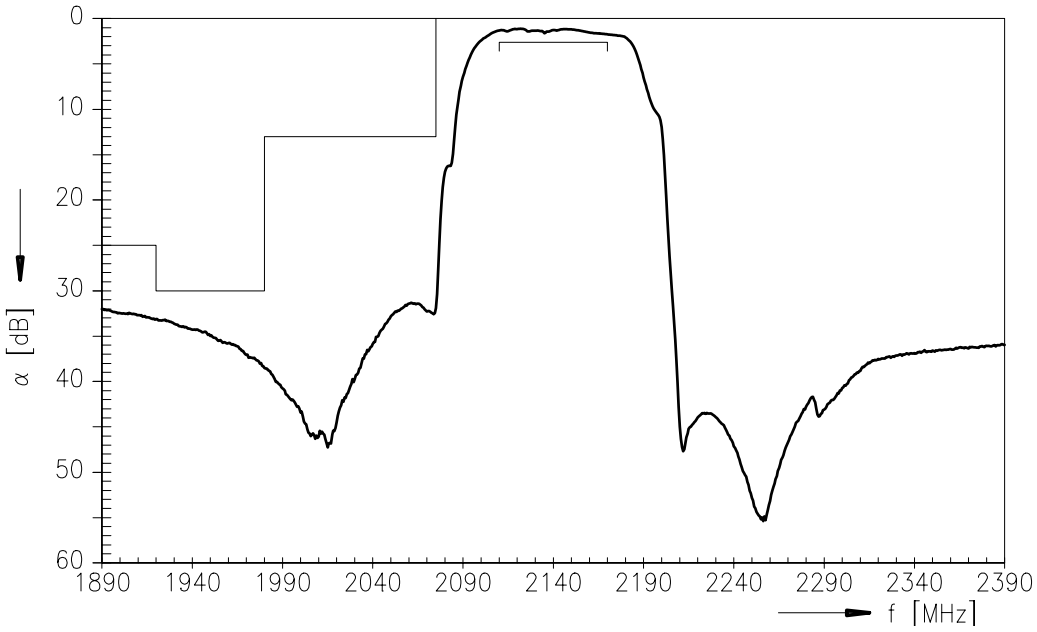
		min.	typ.	max.	
Center frequency	f_c	—	2140,0	—	MHz
Maximum insertion attenuation	α_{max}				
2110,0 ...2170,0 MHz		—	2,0	2,2	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
2110,0 ...2170,0 MHz		—	0,7	0,9	dB
Amplitude ripple per 5 MHz channel (p-p)	$\Delta\alpha_{5MHz}$				
2110,0 ...2170,0 MHz		—	0,3	0,4	dB/5MHz
Output phase balance ($\phi(S_{out2})-\phi(S_{out1})+180°$)					
2110,0 MHz ... 2170,0 MHz		-10	0 / 3	10	°
Output amplitude balance ($\lvert S_{out2}/S_{out1}\rvert$)					
2110,0 MHz ... 2170,0 MHz		-1,0	0 / 0,3	1,0	dB
Input VSWR	$vswr_{IN}$				
2110,0 ...2170,0 MHz		—	1,8	2,1	
Output VSWR	$vswr_{OUT}$				
2110,0 ...2170,0 MHz		—	1,8	2,1	
Attenuation	α_{min}				
0,3 ...1920,0 MHz		25	29	—	dB
1920,0 ...1980,0 MHz		30	33	—	dB
1980,0 ...2075,0 MHz		14	28	—	dB
2400,0 ...6000,0 MHz		20	26	—	dB

Characteristics

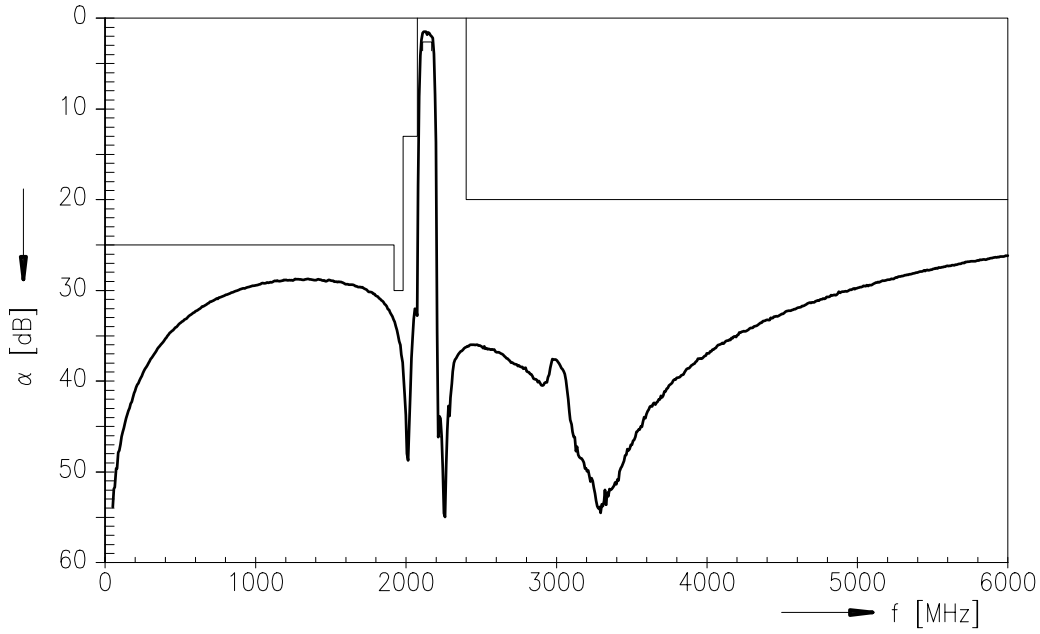
Reference temperature: T = -10 ... 85 °C
Terminating source impedance: Z_S = 100 Ω
Terminating load impedance: Z_L = 100 Ω

		min.	typ.	max.	
Center frequency	f_c	—	2140,0	—	MHz
Maximum insertion attenuation	α_{max}				
2110,0 ...2170,0 MHz		—	2,0	2,6	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
2110,0 ...2170,0 MHz		—	0,7	1,0	dB
Amplitude ripple per 5 MHz channel (p-p)	$\Delta\alpha_{5MHz}$				
2110,0 ...2170,0 MHz		—	0,4	0,5	dB/5MHz
Output phase balance ($\phi(S_{out2})-\phi(S_{out1})+180°$)					
2110,0 MHz ... 2170,0 MHz		-10	0 / 3	10	°
Output amplitude balance ($\lvert S_{out2}/S_{out1}\rvert$)					
2110,0 MHz ... 2170,0 MHz		-1,0	0 / 0,3	1,0	dB
Input VSWR	$vswr_{IN}$				
2110,0 ...2170,0 MHz		—	1,8	2,1	
Output VSWR	$vswr_{OUT}$				
2110,0 ...2170,0 MHz		—	1,8	2,1	
Attenuation	α_{min}				
0,3 ...1920,0 MHz		25	29	—	dB
1920,0 ...1980,0 MHz		30	33	—	dB
1980,0 ...2075,0 MHz		13	28	—	dB
2400,0 ...6000,0 MHz		20	26	—	dB

Transfer function:



Transfer function (wideband):



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

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.