SAW filters for mobile communications

Series/Type: B9005

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39212B9005E810		2008-03-14	2008-08-31	2008-10-15

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.

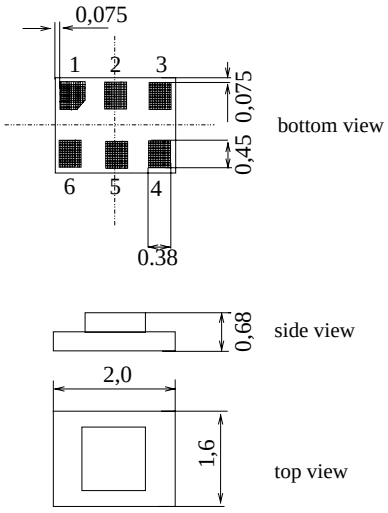
Chip sized SAW package **DCS6R**

Features

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

Terminals

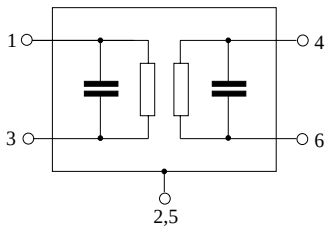
- Ni, gold-plated



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

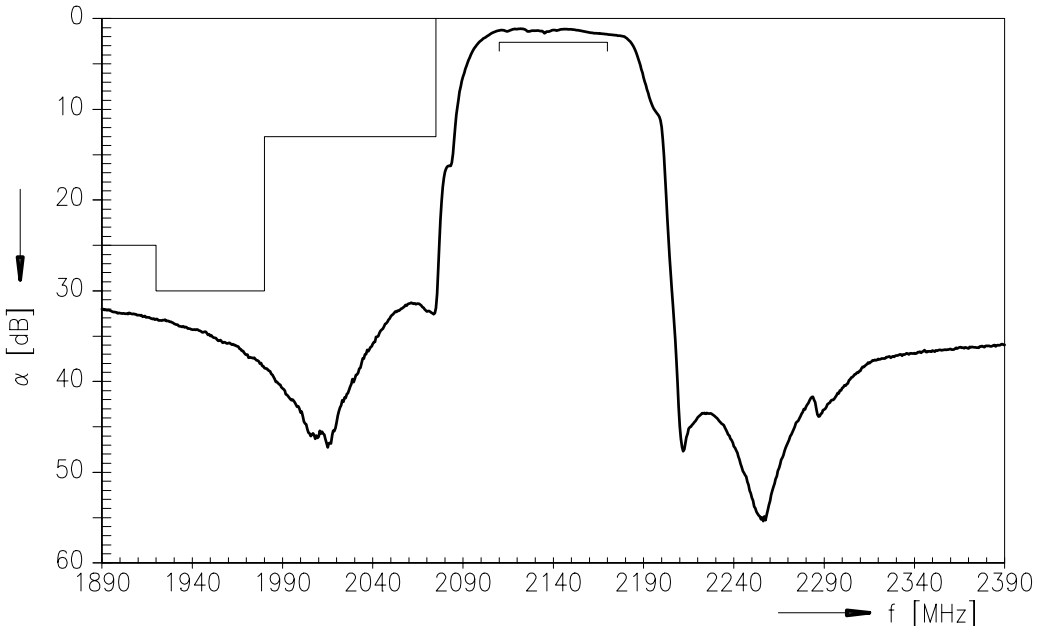
		min.	typ.	max.	
Center frequency	f_c	—	2140,0	—	MHz
Maximum insertion attenuation	α_{max}				
2110,0 ...2170,0 MHz		—	2,0	2,2	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
2110,0 ...2170,0 MHz		—	0,7	0,9	dB
Amplitude ripple per 5 MHz channel (p-p)	$\Delta\alpha_{5MHz}$				
2110,0 ...2170,0 MHz		—	0,3	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

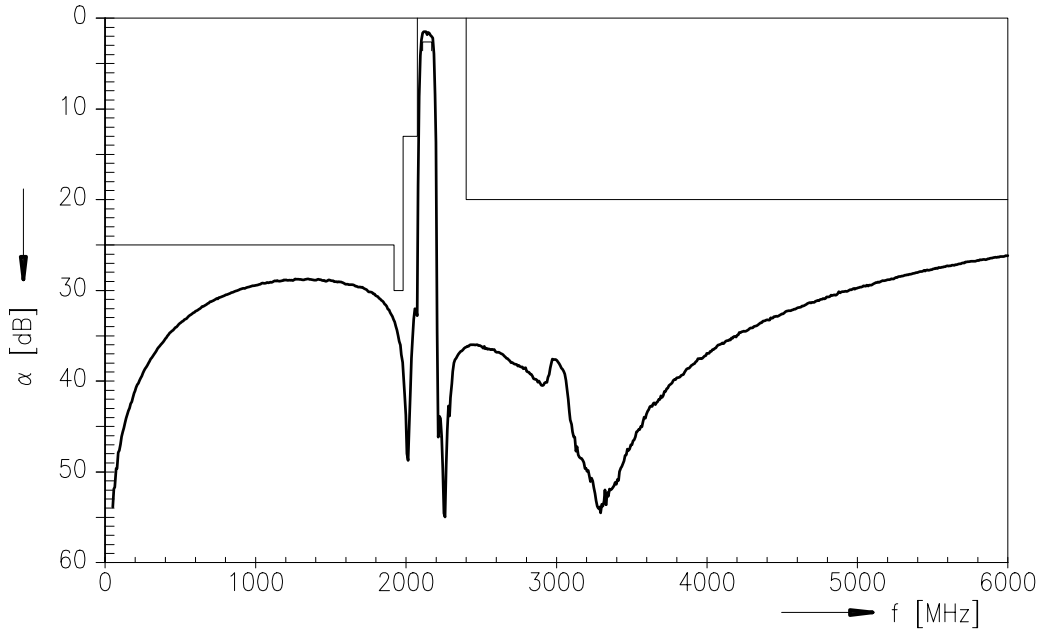
Reference temperature: T = -10 ... 85 °C
Terminating source impedance: Z_S = 100 Ω
Terminating load impedance: Z_L = 100 Ω

		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):



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