



SAW Components

Data Sheet B7752





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Low-Loss Filter for Mobile Communication

2140,0 MHz

Data Sheet



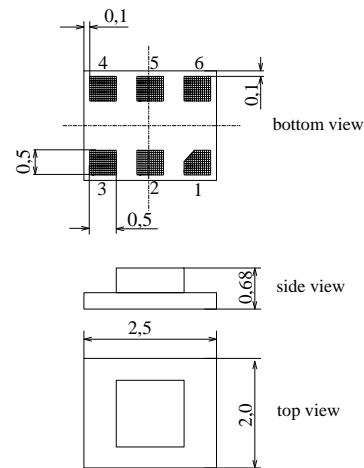
Chip Sized SAW Package DCS6K

Features

- Low-loss RF filter for mobile telephone W-CDMA system, receive path
- Low amplitude ripple
- Usable passband 60 MHz
- Unbalanced to balanced operation
- Impedance transformation from 50Ω to 200Ω
- Package for **Surface Mounted Technology (SMT)**
- Chip Sized SAW Package (CSSP)

Terminals

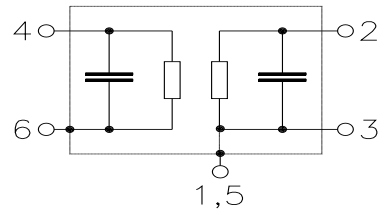
- Gold-plated Ni



Dimensions in mm, approx. weight 0,012 g

Pin configuration

- 2 Input, unbalanced
- 4, 6 Output, balanced
- 1, 3, 5 To be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B7752	B39212-B7752-C910	C61157-A7-A97	F61074-V8153-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operating temperature range	T	- 20/+ 85	°C	
Storage temperature range	T_{stg}	- 40/+ 85	°C	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}	50	V	
Source power	P_S	10	dBm	



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Characteristics

Operating temperature range: $T = +25^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 200\ \Omega$ (balanced) || 12 nH

		min.	typ.	max.	
Center frequency	f_C	—	2140,0	—	MHz
Maximum insertion attenuation	α_{\max}	—	2,4	2,8	dB
2110,0 ... 2170,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,8	1,2	dB
2110,0 ... 2170,0 MHz					
Amplitude ripple per 5MHz channel (p-p)	$\Delta\alpha_{5\text{MHz}}$	—	0,3	0,5	dB
2110,0 ... 2170,0 MHz					
Input VSWR		—	1,9	2,2	
2110,0 ... 2170,0 MHz					
Output VSWR		—	1,9	2,2	
2110,0 ... 2170,0 MHz					
Output amplitude balance (S_{31}/S_{21})		-1,0	0	1,0	dB
2110,0 ... 2170,0 MHz					
Output phase balance ($\phi(S_{31})-\phi(S_{21})+180^{\circ}$)		-10,0	0	10,0	degree
2110,0 ... 2170,0 MHz					
Attenuation	α				
180,0 ... 200,0 MHz		60	80	—	dB
200,0 ... 1000,0 MHz		50	58	—	dB
1000,0 ... 1880,0 MHz		35	40	—	dB
1880,0 ... 1980,0 MHz		30	36	—	dB
1980,0 ... 2050,0 MHz		24	28	—	dB
2205,0 ... 2255,0 MHz		15	22	—	dB
2255,0 ... 2300,0 MHz		20	27	—	dB
2300,0 ... 2490,0 MHz		27	34	—	dB
2490,0 ... 2550,0 MHz		35	40	—	dB
2550,0 ... 3200,0 MHz		35	39	—	dB
3200,0 ... 6000,0 MHz		40	54	—	dB



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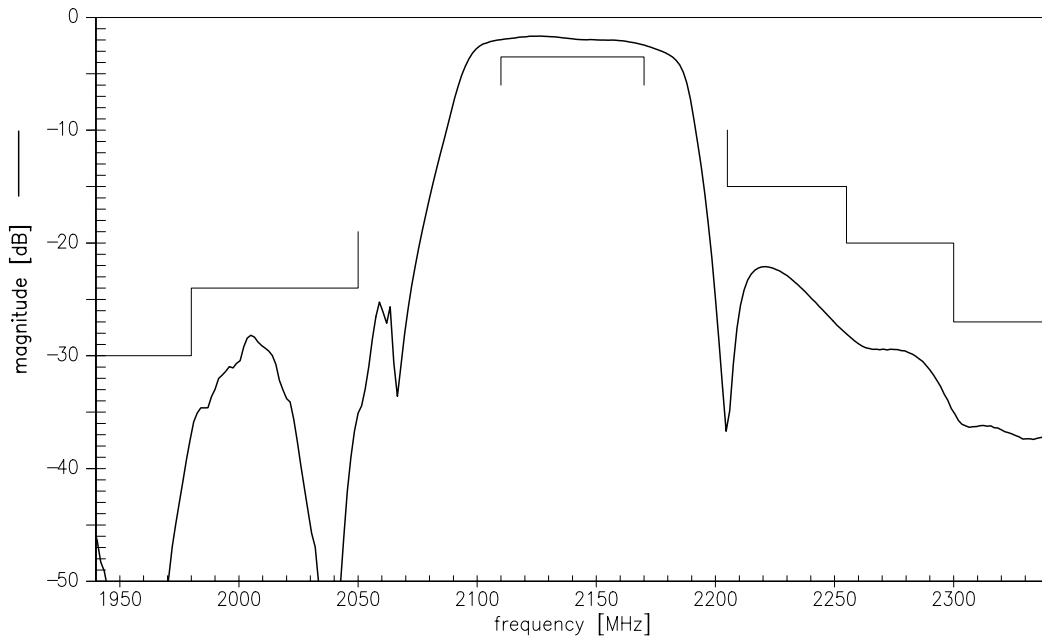
Characteristics

Operating temperature range: $T = -20$ to $+85$ °C
 Terminating source impedance: $Z_S = 50$ Ω
 Terminating load impedance: $Z_L = 200$ Ω (balanced) || 12 nH

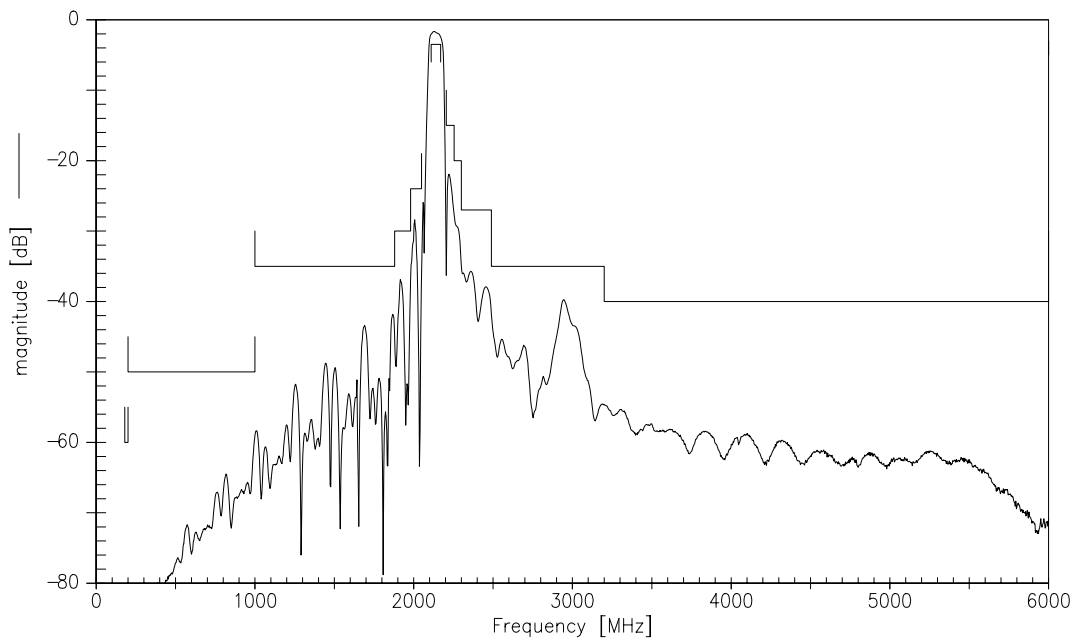
		min.	typ.	max.	
Center frequency	f_C	—	2140,0	—	MHz
Maximum insertion attenuation	α_{max}	—	2,8	3,2	dB
2110,0 ... 2170,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	1,2	1,5	dB
2110,0 ... 2170,0 MHz					
Amplitude ripple per 5MHz channel (p-p)	$\Delta\alpha_{5MHz}$	—	0,3	0,5	dB
2110,0 ... 2170,0 MHz					
Input VSWR		—	2,0	2,2	
2110,0 ... 2170,0 MHz					
Output VSWR		—	2,0	2,2	
2110,0 ... 2170,0 MHz					
Output amplitude balance (S_{31}/S_{21})		-1,0	0	1,5	dB
2110,0 ... 2170,0 MHz					
Output phase balance ($\phi(S_{31})-\phi(S_{21})+180^\circ$)		-10,0	0	15,0	degree
2110,0 ... 2170,0 MHz					
Attenuation	α				
180,0 ... 200,0 MHz		60	80	—	dB
200,0 ... 1000,0 MHz		50	58	—	
1000,0 ... 1880,0 MHz		35	40	—	dB
1880,0 ... 1980,0 MHz		30	36	—	
1980,0 ... 2050,0 MHz		24	28	—	dB
2205,0 ... 2255,0 MHz		15	21	—	
2255,0 ... 2300,0 MHz		20	27	—	dB
2300,0 ... 2490,0 MHz		27	34	—	
2490,0 ... 2550,0 MHz		35	40	—	dB
2550,0 ... 3200,0 MHz		35	39	—	
3200,0 ... 6000,0 MHz		40	54	—	dB



Transfer function:

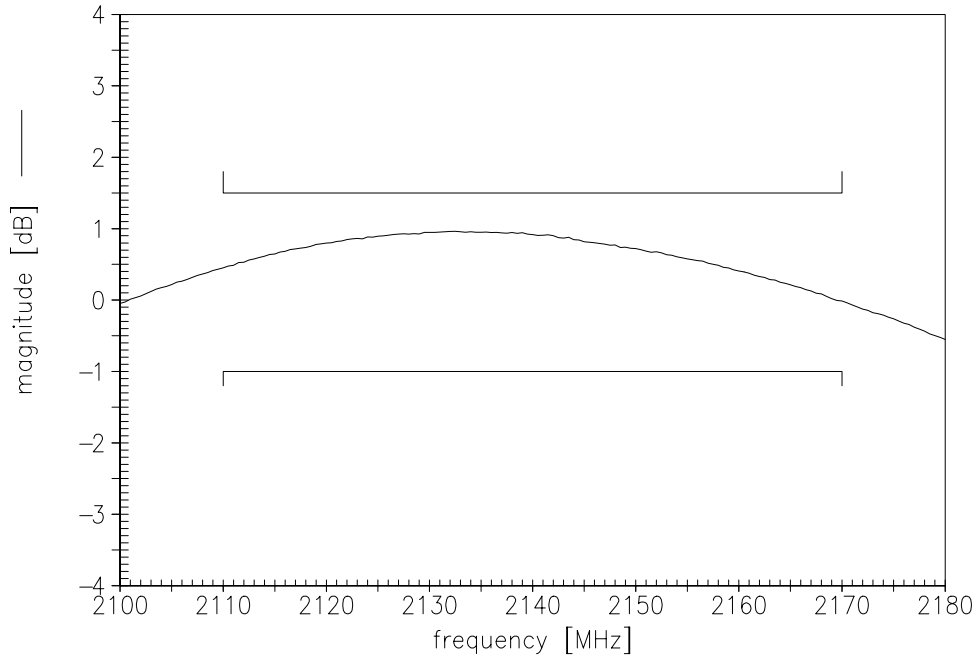


Transfer function (wide band) :

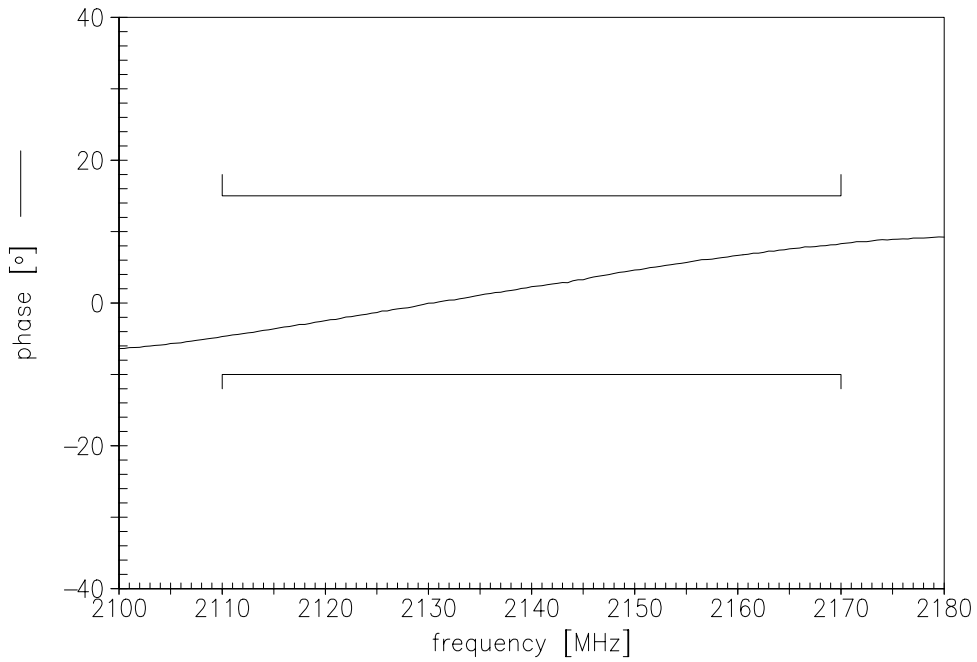




Output amplitude balance($|S_{31}/S_{21}|$):



Output phase balance($\phi(S_{31})-\phi(S_{21})+180^\circ$):





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