RF Filters for Cellular Phones

Series/Type: B7752

The following products presented in this data sheet are being withdrawn.

| Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39212B7752C910	B39212B9408K610	2007-09-21	2007-12-31	2008-03-31

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.

⌖TDK

SAW Components	B7752
Low-Loss Filter for Mobile Communication	**2140,0 MHz**

Data Sheet ▬MD

Chip **S**ized **S**AW **P**ackage **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 **S**urface **M**ounted **T**echnology (**SMT**)
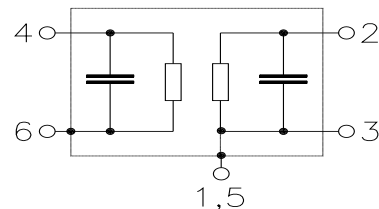- Chip Sized SAW Package (CSSP)

Terminals

- Gold-plated Ni
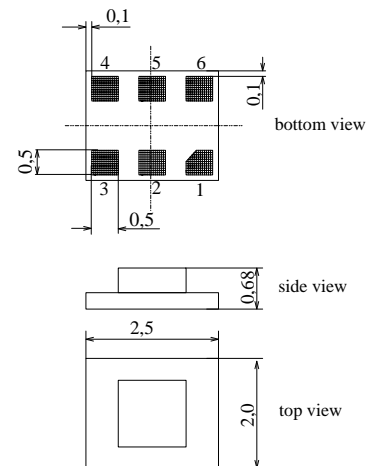
Dimensions in mm, approx. weight 0,012 g

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 **S**ensitive **D**evice (**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

SAW Components	**B7752**
Low-Loss Filter for Mobile Communication	**2140,0 MHz**

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Characteristics

Operating temperature range: T $= +25°C$
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}				
	2110,0 ... 2170,0 MHz		—	2,4	2,8	dB
Amplitude ripple (p-p)		$\Delta\alpha$				
	2110,0 ... 2170,0 MHz		—	0,8	1,2	dB
Amplitude ripple per 5MHz channel (p-p)		$\Delta\alpha_{5MHz}$				
	2110,0 ... 2170,0 MHz		—	0,3	0,5	dB
Input VSWR						
	2110,0 ... 2170,0 MHz		—	1,9	2,2	
Output VSWR						
	2110,0 ... 2170,0 MHz		—	1,9	2,2	
Output amplitude balance($\lvert S_{31}/S_{21}\rvert$)						
	2110,0 ... 2170,0 MHz		-1,0	0	1,0	dB
Output phase balance($\phi(S_{31})-\phi(S_{21})+180°$)						
	2110,0 ... 2170,0 MHz		-10,0	0	10,0	degree
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

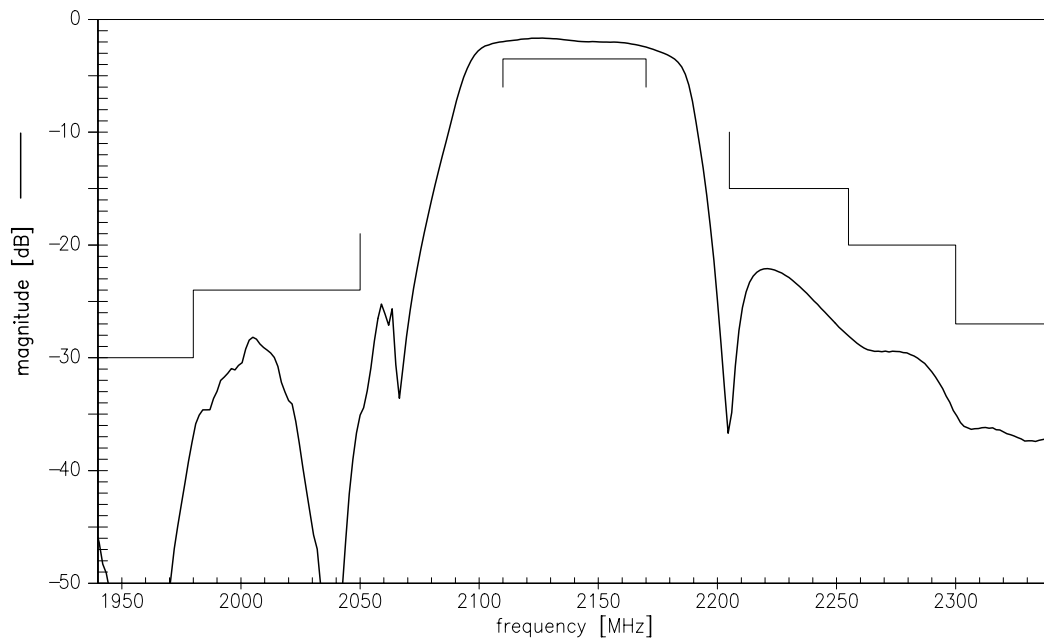| SAW Components	B7752
Low-Loss Filter for Mobile Communication	**2140,0 MHz**

Data Sheet　　　　　SMD

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}				
2110,0 ... 2170,0　MHz		—	2,8	3,2	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
2110,0 ... 2170,0　MHz		—	1,2	1,5	dB
Amplitude ripple per 5MHz channel　(p-p)	$\Delta\alpha_{5MHz}$				
2110,0 ... 2170,0　MHz		—	0,3	0,5	dB
Input VSWR					
2110,0 ... 2170,0　MHz		—	2,0	2,2	
Output VSWR					
2110,0 ... 2170,0　MHz		—	2,0	2,2	
Output amplitude balance($|S_{31}/S_{21}|$)					
2110,0 ... 2170,0　MHz		-1,0	0	1,5	dB
Output phase balance($\phi(S_{31})-\phi(S_{21})+180˚$)					
2110,0 ... 2170,0　MHz		-10,0	0	15,0	degree
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	21	—	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

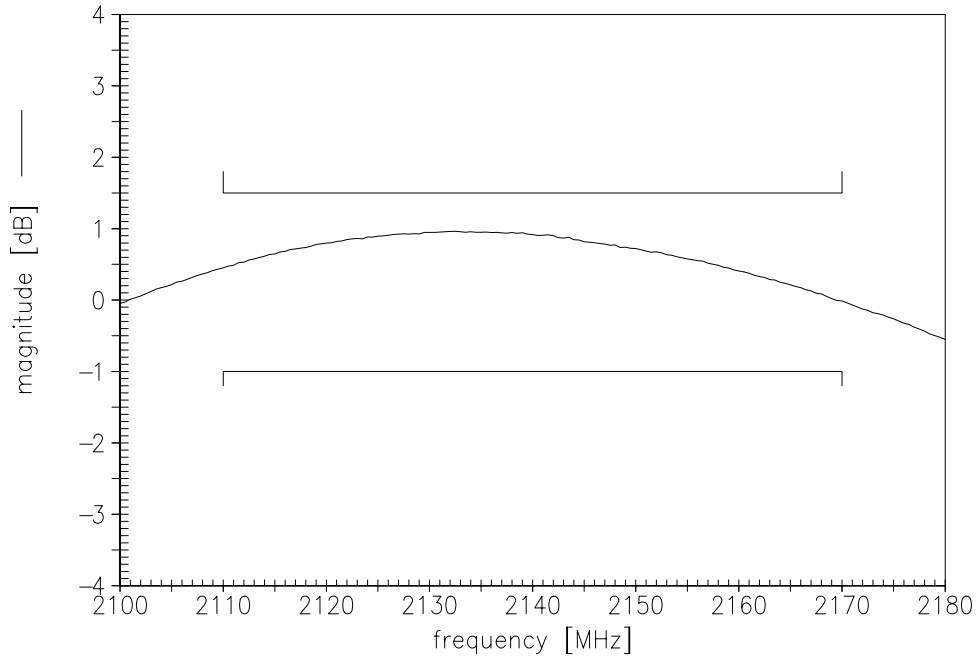Data Sheet   SMD

Transfer function:

Transfer function (wide band) :
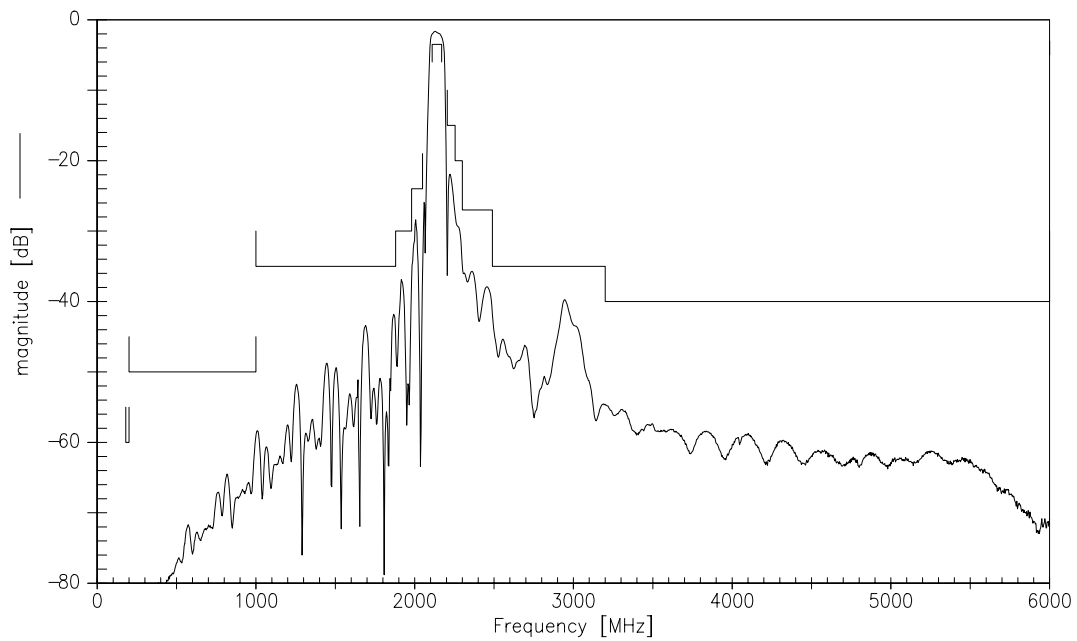
Output amplitude balance$(|S_{31}/S_{21}|)$**:**

Output phase balance$(\phi(S_{31})-\phi(S_{21})+180°)$**:**
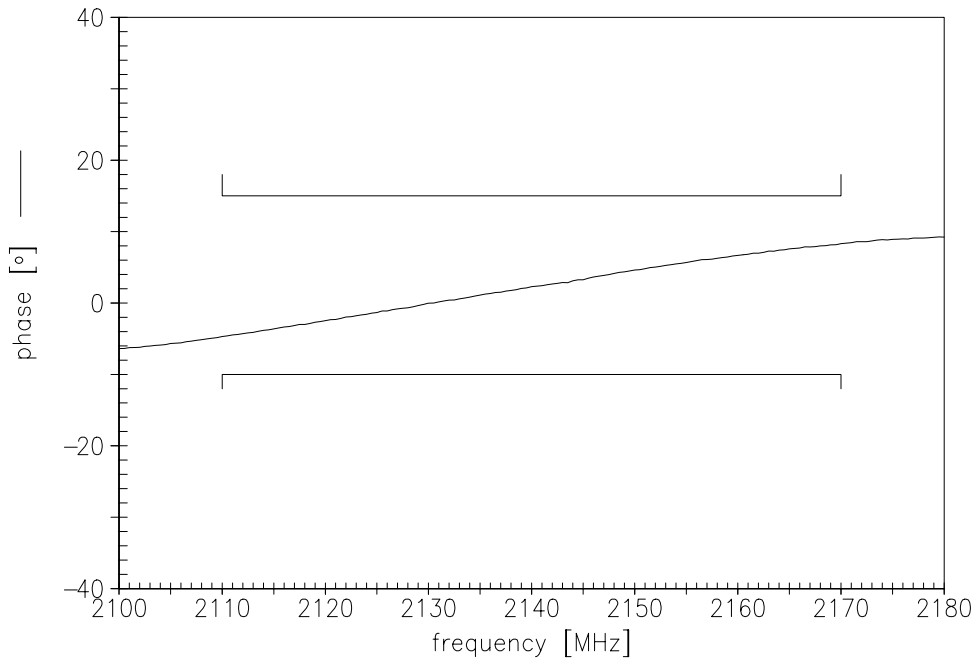
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This brochure replaces the previous edition.

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