



SAW Components

Data Sheet B7745





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Low-Loss Filter for Mobile Communication

1950,0 MHz

Data Sheet



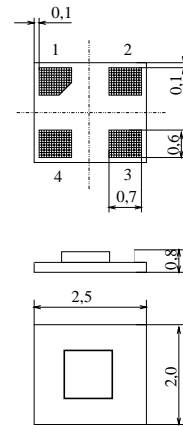
Chip Sized SAW Package DCS4D

Features

- RF filter for mobile telephone UMTS systems, transmit path
- Low insertion loss, low amplitude ripple
- Usable passband 60 MHz
- Package for Surface Mounted Technology (SMT)

Terminals

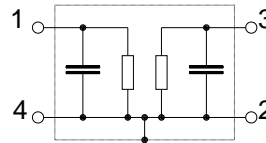
- Gold-plated Ni



Dimensions in mm, approx. weight 0,015 g

Pin configuration

- 1 Input
- 3 Output
- 2,4 Ground



Type	Ordering code	Marking and Package according to	Packing according to
B7745	B39192-B7745-C810	C61157-A7-A89	F61074-V8125-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}	3	V	
Input Power max.	P_{IN}	8	dBm	



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Characteristics

Operating temperature range : $T = 25\text{ }^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

				min.	typ.	max.	
Center frequency			f_C	—	1950,0	—	MHz
Maximum insertion attenuation			α_{\max}	—	2,4	2,6	dB
1920,0...	1980,0	MHz					
Amplitude ripple (p-p)			$\Delta\alpha$	—	1,0	1,2	dB
1920,0...	1980,0	MHz					
Absolute attenuation			α				
DC..	1000,0	MHz		36	40	—	dB
1000,0..	1600,0	MHz		35	38	—	dB
1705,0..	1715,0	MHz		30	34	—	dB
1805,0..	1880,0	MHz		23	27	—	dB
2110,0...	2170,0	MHz		28	31	—	dB
2300,0...	2360,0	MHz		31	34	—	dB
2490,0...	2550,0	MHz		33	37	—	dB
2680,0...	2740,0	MHz		35	40	—	dB
3060,0...	3120,0	MHz		31	35	—	dB
3840,0...	3960,0	MHz		27	33	—	dB
4000,0...	6000,0	MHz		20	27	—	dB
Input VSWR				—	1,6	1,8	
1920,0...	1980,0	MHz					
Output VSWR				—	1,8	2,0	
1920,0...	1980,0	MHz					



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Characteristics

Operating temperature range : $T = -20$ to $+75$ °C
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 50 \Omega$

				min.	typ.	max.	
Center frequency			f_C	—	1950,0	—	MHz
Maximum insertion attenuation			α_{max}	—	2,4	2,8	dB
1920,0...	1980,0	MHz					
Amplitude ripple (p-p)			$\Delta\alpha$	—	1,0	1,4	dB
1920,0...	1980,0	MHz					
Absolute attenuation			α				
DC..	1000,0	MHz		36	40	—	dB
1000,0..	1600,0	MHz		35	38	—	dB
1705,0..	1715,0	MHz		30	34	—	dB
1805,0..	1880,0	MHz		22	26	—	dB
2110,0...	2170,0	MHz		28	31	—	dB
2300,0...	2360,0	MHz		31	34	—	dB
2490,0...	2550,0	MHz		33	37	—	dB
2680,0...	2740,0	MHz		35	40	—	dB
3060,0...	3120,0	MHz		31	35	—	dB
3840,0...	3960,0	MHz		27	33	—	dB
4000,0...	6000,0	MHz		20	27	—	dB
Input VSWR				—	1,6	1,8	
1920,0...	1980,0	MHz					
Output VSWR				—	1,8	2,0	
1920,0...	1980,0	MHz					



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Characteristics

Operating temperature range : $T = -10$ to $+85$ °C
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 50 \Omega$

				min.	typ.	max.	
Center frequency			f_C	—	1950,0	—	MHz
Maximum insertion attenuation			α_{max}	—	2,5	2,9	dB
1920,0...	1980,0	MHz					
Amplitude ripple (p-p)			$\Delta\alpha$	—	1,1	1,5	dB
1920,0...	1980,0	MHz					
Absolute attenuation			α				
DC..	1000,0	MHz		36	40	—	dB
1000,0..	1600,0	MHz		35	38	—	dB
1705,0..	1715,0	MHz		30	34	—	dB
1805,0..	1880,0	MHz		22	26	—	dB
2110,0...	2170,0	MHz		28	31	—	dB
2300,0...	2360,0	MHz		31	34	—	dB
2490,0...	2550,0	MHz		33	37	—	dB
2680,0...	2740,0	MHz		35	40	—	dB
3060,0...	3120,0	MHz		31	35	—	dB
3840,0...	3960,0	MHz		27	33	—	dB
4000,0...	6000,0	MHz		20	27	—	dB
Input VSWR				—	1,6	1,8	
1920,0...	1980,0	MHz					
Output VSWR				—	1,8	2,0	
1920,0...	1980,0	MHz					



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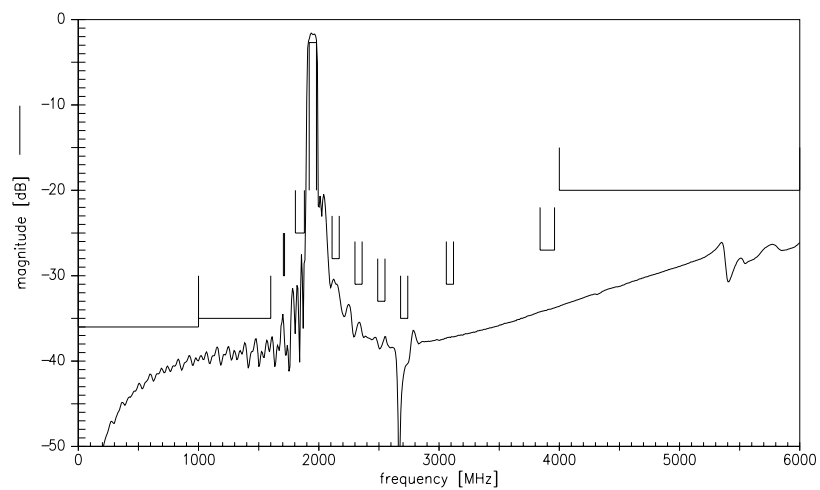
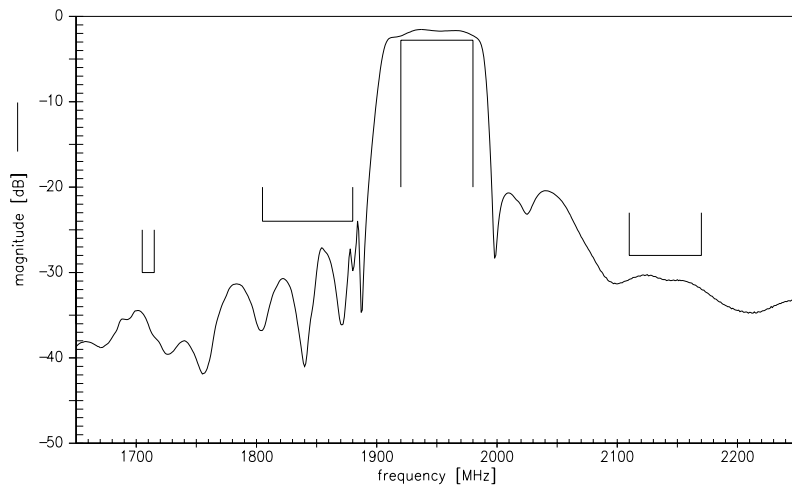
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Transfer function (spec. for 25° C)





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