



SAW Components

Data Sheet B7745





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Low-Loss Filter for Mobile Communication

1950,0 MHz

Data Sheet



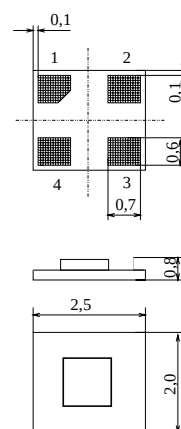
Chip Sized SAW Package DCS4D

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

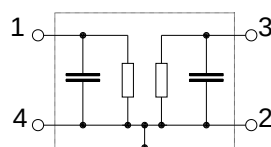
- Gold-plated Ni



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		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: $Z_S = 50\text{ }\Omega$
Terminating load impedance: $Z_L = 50\text{ }\Omega$

		min.	typ.	max.	
Center frequency	f_C	—	1950,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
1920,0... 1980,0 MHz		—	2,4	2,6	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1920,0... 1980,0 MHz		—	1,0	1,2	dB
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					
1920,0... 1980,0 MHz		—	1,6	1,8	
Output VSWR					
1920,0... 1980,0 MHz		—	1,8	2,0	



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Characteristics

Operating temperature range :	$T = -20 \text{ to } +75 \text{ }^{\circ}\text{C}$
Terminating source impedance:	$Z_S = 50 \text{ } \Omega$
Terminating load impedance:	$Z_L = 50 \text{ } \Omega$

		min.	typ.	max.	
Center frequency	f_C	—	1950,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
1920,0... 1980,0 MHz		—	2,4	2,8	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1920,0... 1980,0 MHz		—	1,0	1,4	dB
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					
1920,0... 1980,0 MHz		—	1,7	2,0	
Output VSWR					
1920,0... 1980,0 MHz		—	1,9	2,2	



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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	$\alpha_{\max}$					
1920,0... 1980,0 MHz			—	2,5	2,9	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
1920,0... 1980,0 MHz			—	1,1	1,5	dB
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						
1920,0... 1980,0 MHz			—	1,7	2,0	
Output VSWR						
1920,0... 1980,0 MHz			—	2,0	2,2	



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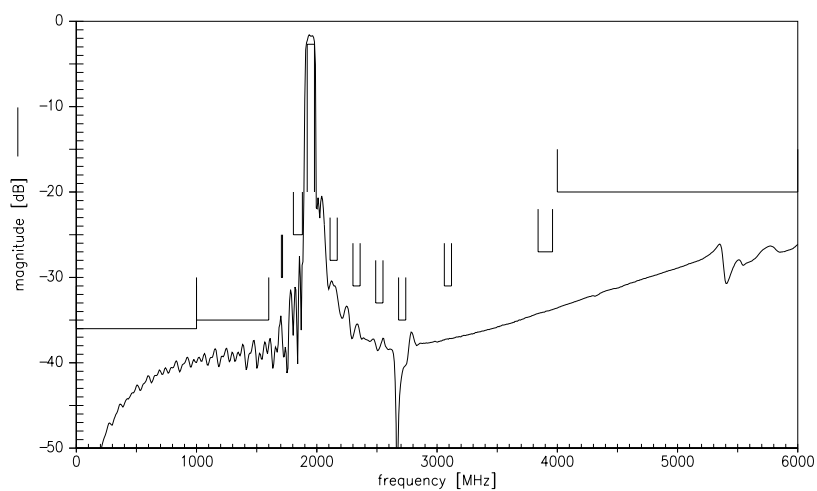
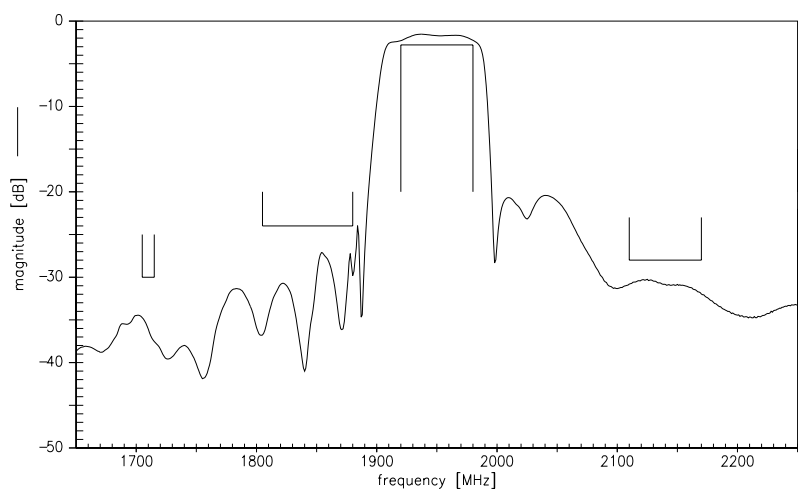
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Transfer function (spec. for 25°C)





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Published by EPCOS AG

Surface Acoustic Wave Components Division, SAW MC WT

P.O. Box 80 17 09, D-81617 München

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