



SAW Components

Data Sheet B7750





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Low-Loss Filter for Mobile Communication

2140,0 MHz

Data Sheet



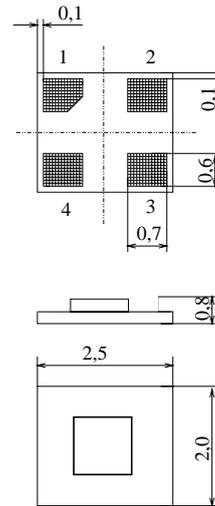
Chip Sized SAW Package DCS4D

Features

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

Terminals

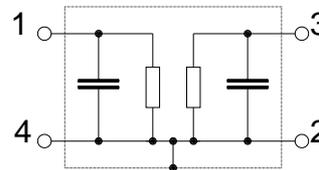
- Gold-plated Ni



Dimensions in mm, approx. weight 0,012 g

Pin configuration

- 1 Input
- 3 Output
- 2,4 Ground



Type	Ordering code	Marking and Package according to	Packing according to
B7750	B39212-B7750-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}	13	dbm	source and load impedance 50 Ω



Characteristics

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

		min.	typ.	max.	
Center frequency	f_C	—	2140,0	—	MHz
Maximum insertion attenuation	α_{max}				
2110,0... 2170,0 MHz		—	2,4	2,6	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
2110,0... 2170,0 MHz		—	0,7	0,9	dB
Absolute attenuation	α				
0 ... 1500,0 MHz		40	43	—	dB
1500,0.. 1880,0 MHz		35	40	—	dB
1920,0.. 1980,0 MHz		34	36	—	dB
2025,0.. 2050,0 MHz		23	25	—	dB
2205,0.. 2265,0 MHz		15	25	—	dB
2230,0.. 2260,0 MHz		22	24	—	dB
2300,0... 2360,0 MHz		33	38	—	dB
2490,0... 2550,0 MHz		37	43	—	dB
2870,0... 2930,0 MHz		31	36	—	dB
4000,0... 6000,0 MHz		20	31	—	dB
Input VSWR					
2110,0... 2170,0 MHz		—	1,9	2,1	
Output VSWR					
2110,0... 2170,0 MHz		—	1,8	2,0	



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	—	2140,0	—	MHz
Maximum insertion attenuation 2110,0... 2170,0 MHz	α_{max}	—	2,5	2,7	dB
Amplitude ripple (p-p) 2110,0... 2170,0 MHz	$\Delta\alpha$	—	0,8	1,0	dB
Absolute attenuation	α				
0 ... 1500,0 MHz		40	43	—	dB
1500,0.. 1880,0 MHz		35	40	—	dB
1920,0.. 1980,0 MHz		34	36	—	dB
2025,0.. 2050,0 MHz		20	25	—	dB
2205,0.. 2265,0 MHz		10	20	—	dB
2230,0.. 2260,0 MHz		22	24	—	dB
2300,0... 2360,0 MHz		33	38	—	dB
2490,0... 2550,0 MHz		37	43	—	dB
2870,0... 2930,0 MHz		31	35	—	dB
4000,0... 6000,0 MHz		20	31	—	dB
Input VSWR 2110,0... 2170,0 MHz		—	1,9	2,2	
Output VSWR 2110,0... 2170,0 MHz		—	2,0	2,2	



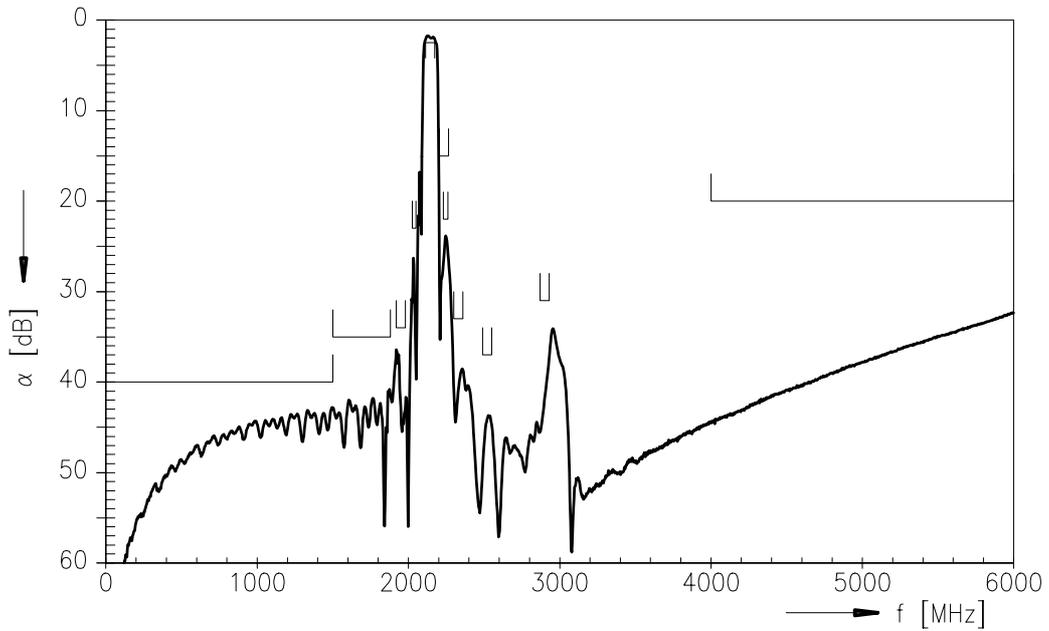
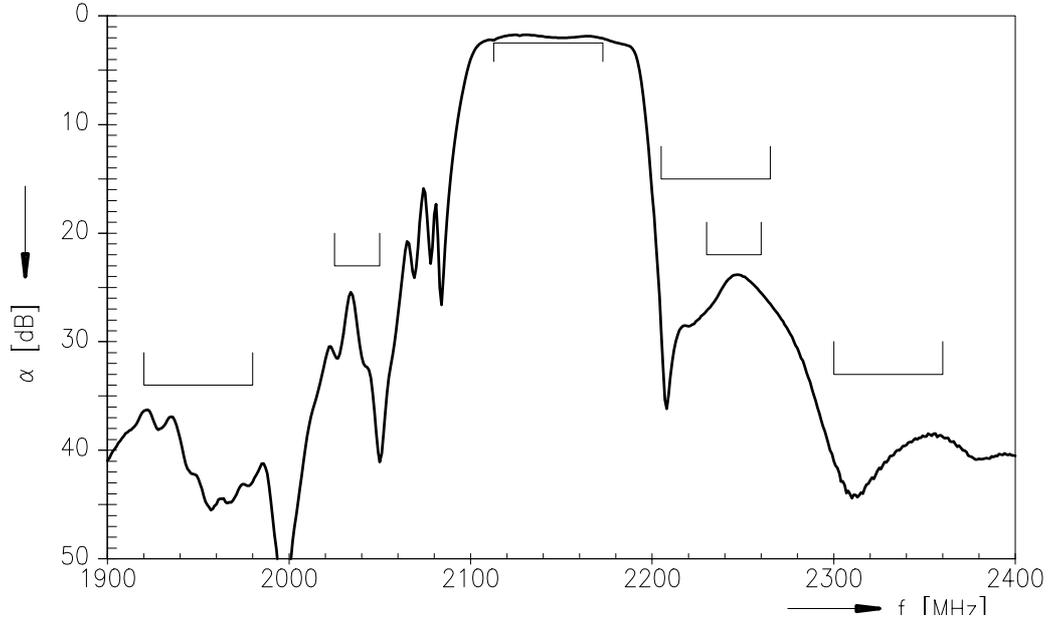
Characteristics

Operating temperature range : $T = -20$ to $+85$ °C
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 50 \Omega$

		min.	typ.	max.	
Center frequency	f_C	—	2140,0	—	MHz
Maximum insertion attenuation 2110,0... 2170,0 MHz	α_{max}	—	2,6	2,8	dB
Amplitude ripple (p-p) 2110,0... 2170,0 MHz	$\Delta\alpha$	—	0,8	1,0	dB
Absolute attenuation	α				
0 ... 1500,0 MHz		40	43	—	dB
1500,0.. 1880,0 MHz		35	40	—	dB
1920,0.. 1980,0 MHz		34	36	—	dB
2025,0.. 2050,0 MHz		20	26	—	dB
2205,0.. 2265,0 MHz		10	20	—	dB
2230,0.. 2260,0 MHz		22	24	—	dB
2300,0... 2360,0 MHz		33	38	—	dB
2490,0... 2550,0 MHz		37	43	—	dB
2870,0... 2930,0 MHz		31	35	—	dB
4000,0... 6000,0 MHz		20	31	—	dB
Input VSWR 2110,0... 2170,0 MHz		—	1,9	2,2	
Output VSWR 2110,0... 2170,0 MHz		—	2,0	2,2	



Transfer function (spec. for 25 °C)





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