



SAW Components

Data Sheet B7750

Data Sheet

An abstract graphic featuring the word "EPCOS" in large, glowing, 3D letters. The letters are white with a blue glow and are positioned diagonally across the frame. In the background, there is a faint, stylized globe with circuitry patterns overlaid on it, all set against a dark, textured background.



SAW Components

B7750

Low-Loss Filter for Mobile Communication

2140,0 MHz

Data Sheet



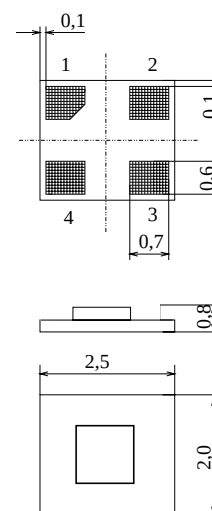
Chip Sized SAW Package DCS4D

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

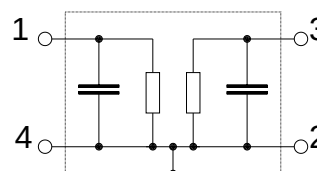
- Gold-plated Ni



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	source and load impedance 50 Ω
Storage temperature range	T_{stg}	- 40/ +85	°C	
DC voltage	V_{DC}	3	V	
Input Power max.	P_{IN}	13	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	—	2140,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$	—	2,4	2,6	dB
2110,0... 2170,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,7	0,9	dB
2110,0... 2170,0 MHz					
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	



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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	—	2140,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$	—	2,5	2,7	dB
2110,0... 2170,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,8	1,0	dB
2110,0... 2170,0 MHz					
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	



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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	$\alpha_{\max}$	—	2,6	2,8	dB
2110,0... 2170,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,8	1,0	dB
2110,0... 2170,0 MHz					
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	



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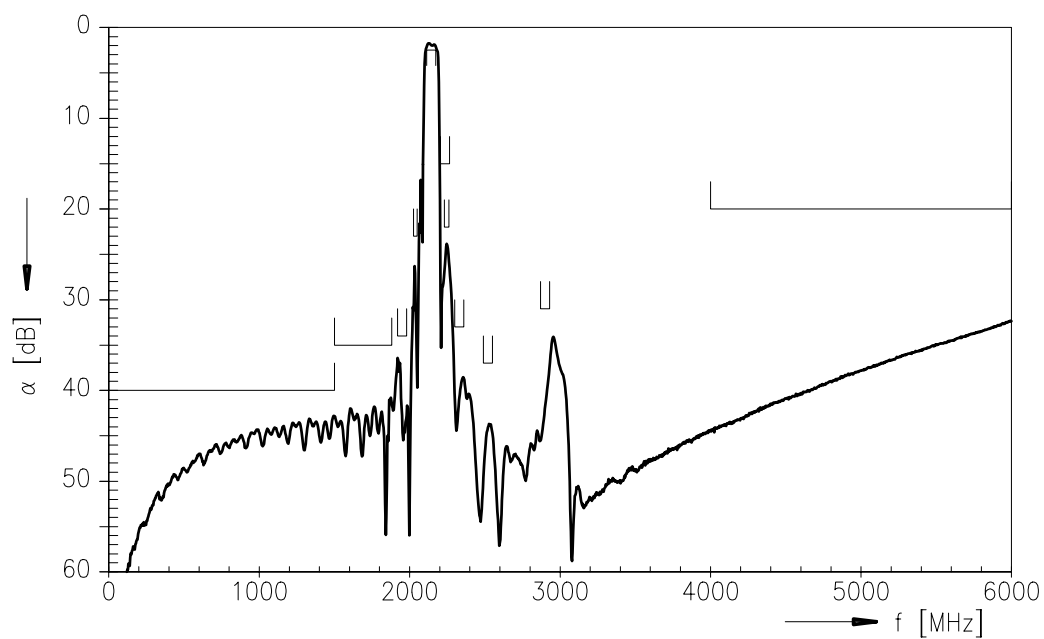
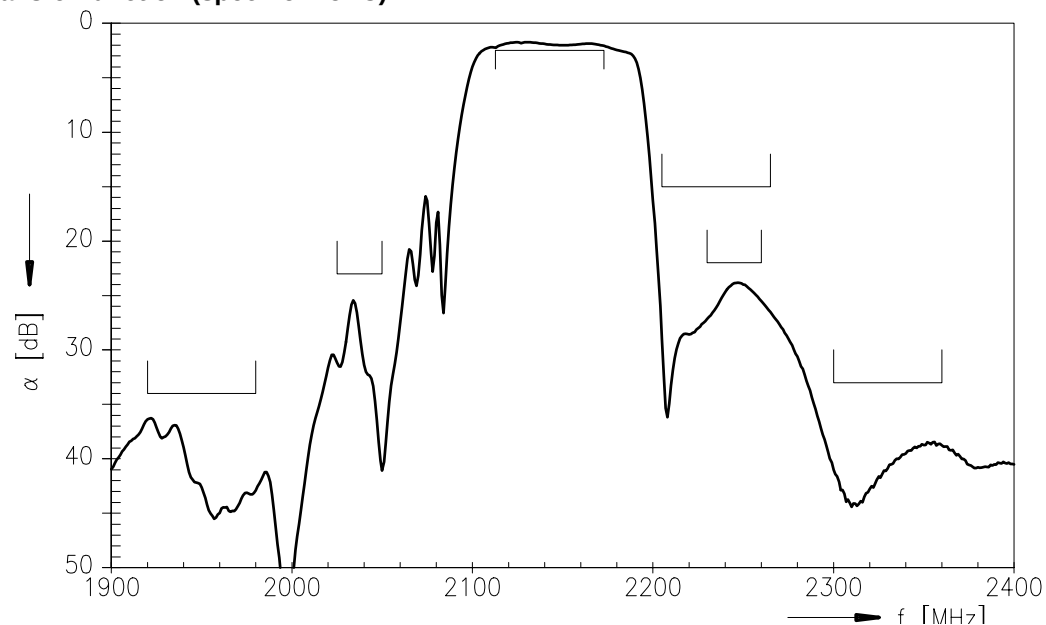
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Transfer function (spec. for 25 °C)





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