



SAW Components

Data Sheet B7744

Data Sheet

A large, stylized, 3D-rendered graphic of the EPCOS logo. The letters "EPCOS" are rendered in a white, glowing, sans-serif font, appearing to be part of a complex, layered structure that resembles a globe or a series of overlapping planes. The background is dark and textured.



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Low-Loss Filter for Mobile Communication

1842,5 MHz

Data Sheet



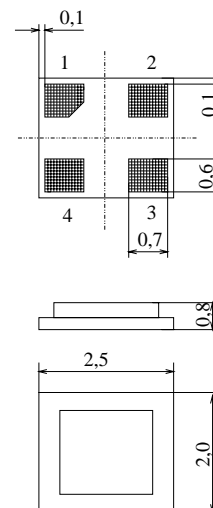
Ceramic package **DCS4D**

Features

- Low-loss RF filter for mobile telephone PCN systems, receive path
- Low amplitude ripple
- Usable passband 75 MHz
- No matching network required for operation at 50 Ω
- Suitable for GPRS class 1 to 12
- Package for **Surface Mounted Technology (SMT)**

Terminals

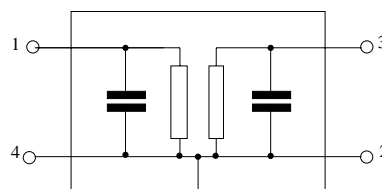
- Gold-plated Ni



Dimensions in mm, approx. weight 0,012 g

Pin configuration

- 1 Input
- 3 Output
- 2, 4 To be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B7744	B39182-B7744-C810	C61157-A7-A89	F61074-V8153-Z000

Electrostatic Sensitive Device (ESD)

Operable temperature range	T	- 10 / + 80	°C	peak power of GSM signal duty cycle 4:8
Storage temperature range	T_{stg}	- 40 / + 85	°C	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}	50	V	
Input power at				
GSM850, GSM900	P_{IN}	15	dBm	
GSM1800, GSM1900	P_{IN}	12	dBm	
Tx bands				



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Characteristics

Operating Temperature Range: $T = +25 \pm 2^\circ\text{C}$
 Terminating source impedance: $Z_S = 50 \Omega$
 Terminating load impedance: $Z_L = 50 \Omega$

		min.	typ.	max.	
Center frequency	f_C	—	1842,5	—	MHz
Maximum insertion attenuation	α_{\max}	—	2,4	3,0	dB
1805,0 ... 1880,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,9	1,7	dB
1805,0 ... 1880,0 MHz					
Input VSWR		—	1,9	2,2	
1805,0 ... 1880,0 MHz					
Output VSWR		—	1,9	2,2	
1805,0 ... 1880,0 MHz					
Attenuation	α				
0,0 ... 1480,0 MHz		35	37	—	dB
1480,0 ... 1705,0 MHz		28	32	—	dB
1705,0 ... 1785,0 MHz		12	16	—	dB
1920,0 ... 1980,0 MHz		15	21	—	dB
1980,0 ... 2400,0 MHz		23	25	—	dB
2400,0 ... 2500,0 MHz		30	37	—	dB
2500,0 ... 3610,0 MHz		25	36	—	dB
3610,0 ... 3760,0 MHz		35	40	—	dB
3760,0 ... 6000,0 MHz		25	34	—	dB



Data Sheet



Characteristics

Operating Temperature Range: $T = -10$ to $+80^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ.	max.	
Center frequency	f_C	—	1842,5	—	MHz
Maximum insertion attenuation	α_{\max}	—	2,4	3,2	dB
1805,0 ... 1880,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,9	1,9	dB
1805,0 ... 1880,0 MHz					
Input VSWR		—	1,9	2,2	
1805,0 ... 1880,0 MHz					
Output VSWR		—	1,9	2,2	
1805,0 ... 1880,0 MHz					
Attenuation	α				
0,0 ... 1480,0 MHz		35	37	—	dB
1480,0 ... 1705,0 MHz		28	32	—	dB
1705,0 ... 1785,0 MHz		11	15	—	dB
1920,0 ... 1980,0 MHz		15	21	—	dB
1980,0 ... 2400,0 MHz		22	24	—	dB
2400,0 ... 2500,0 MHz		30	37	—	dB
2500,0 ... 3610,0 MHz		25	36	—	dB
3610,0 ... 3760,0 MHz		35	40	—	dB
3760,0 ... 6000,0 MHz		25	34	—	dB



Data Sheet



Characteristics

Operating Temperature Range: $T = -30$ to $+85^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ.	max.	
Center frequency	f_C	—	1842,5	—	MHz
Maximum insertion attenuation	α_{\max}	—	2,4	3,2	dB
1805,0 ... 1880,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,9	1,9	dB
1805,0 ... 1880,0 MHz					
Input VSWR		—	1,9	2,2	
1805,0 ... 1880,0 MHz					
Output VSWR		—	1,9	2,2	
1805,0 ... 1880,0 MHz					
Attenuation	α				
0,0 ... 1480,0 MHz		35	37	—	dB
1480,0 ... 1705,0 MHz		28	32	—	dB
1705,0 ... 1785,0 MHz		10	15	—	dB
1920,0 ... 1980,0 MHz		15	21	—	dB
1980,0 ... 2400,0 MHz		22	24	—	dB
2400,0 ... 2500,0 MHz		30	37	—	dB
2500,0 ... 3610,0 MHz		25	36	—	dB
3610,0 ... 3760,0 MHz		35	40	—	dB
3760,0 ... 6000,0 MHz		25	34	—	dB



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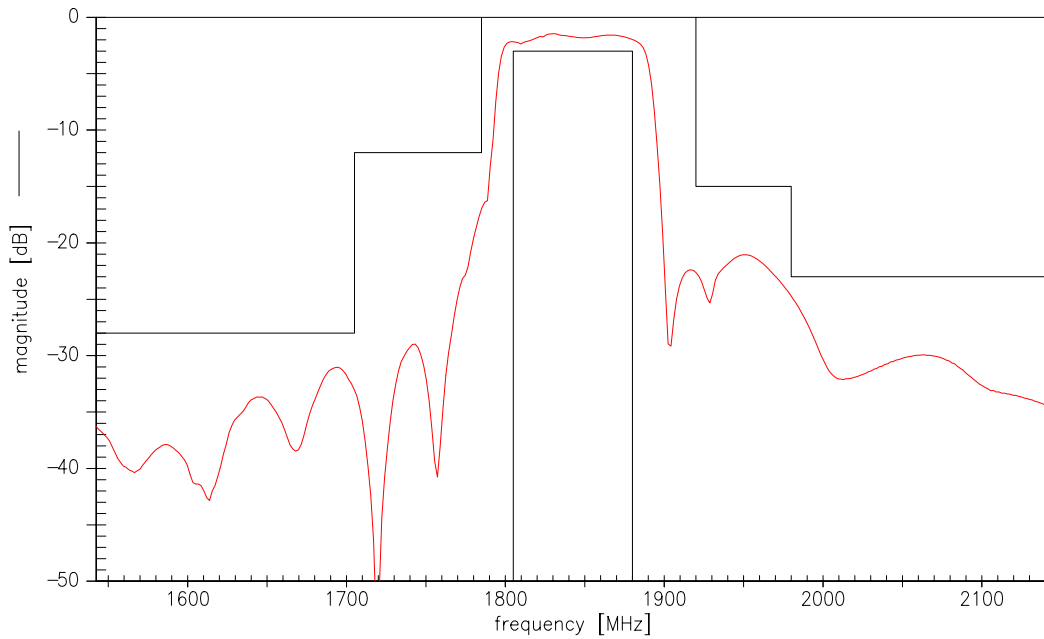
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1842,5 MHz

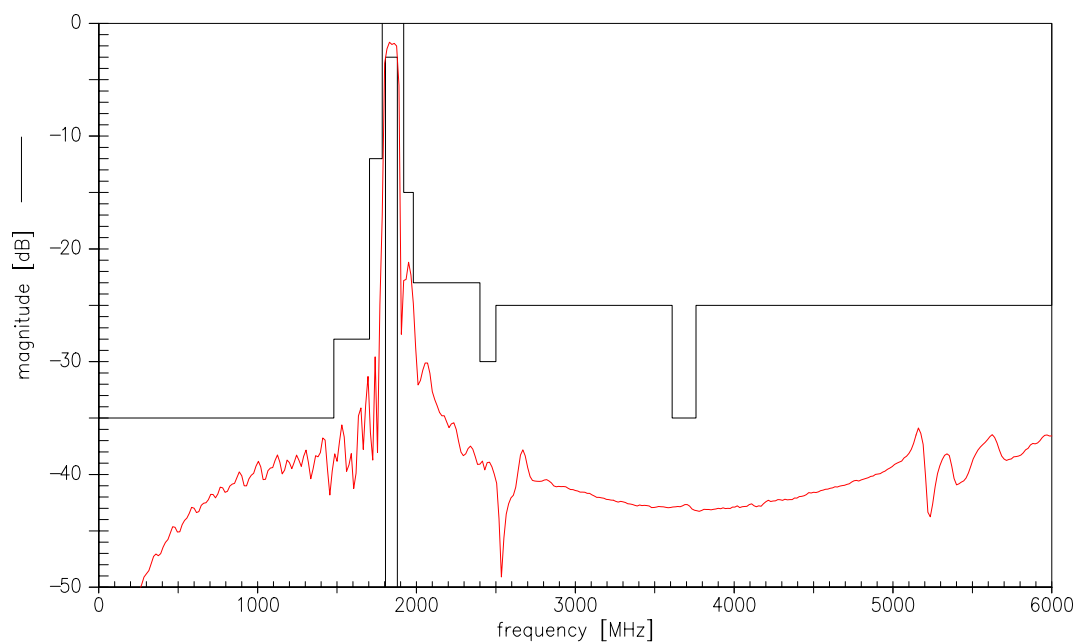
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Transfer function (spec for 25° C)



Transfer function (wideband)





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Published by EPCOS AG

Surface Acoustic Wave Components Division, SAW MC WT

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