EPCOS

SAW Components

Preliminary Data Sheet B7747

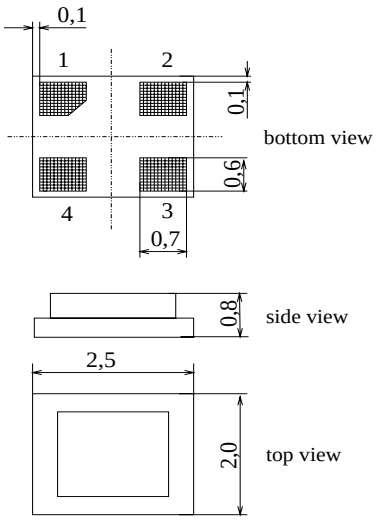
Low-Loss Filter for Mobile Communication 1880,0 MHz

Preliminary Data Sheet

Chip **S**ized **S**AW **P**ackage **DCS4D**

Features

- Low-loss RF filter for mobile telephone PCS systems, transmit path
- High selectivity
- Usable passband 60 MHz
- Unbalanced to unbalanced operation
- No external matching required
- Package for **S**urface **M**ounted **T**echnology (**SMT**)



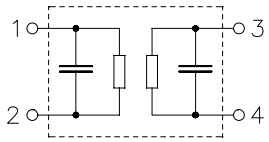
Dimensions in mm, approx. weight 0,027g

Terminals

- Gold-plated Ni

Pin configuration

1	Input
3	Output
2, 4	To be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B7747	B39192-B7747-C810	C61157-A7-A89	F61074-V8153-Z000

Electrostatic **S**ensitive **D**evice (**ESD**)

Maximum ratings

Operating temperature range	T	– 30 /+ 85	˚C	
Storage temperature range	T_{stg}	– 40 /+ 85	˚C	
DC voltage	V_{DC}	3	V	
Input Power max.	P_{IN}	15	dBm	source impedance 50 Ω

Characteristics

Operating Temperature Range: T = 25˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

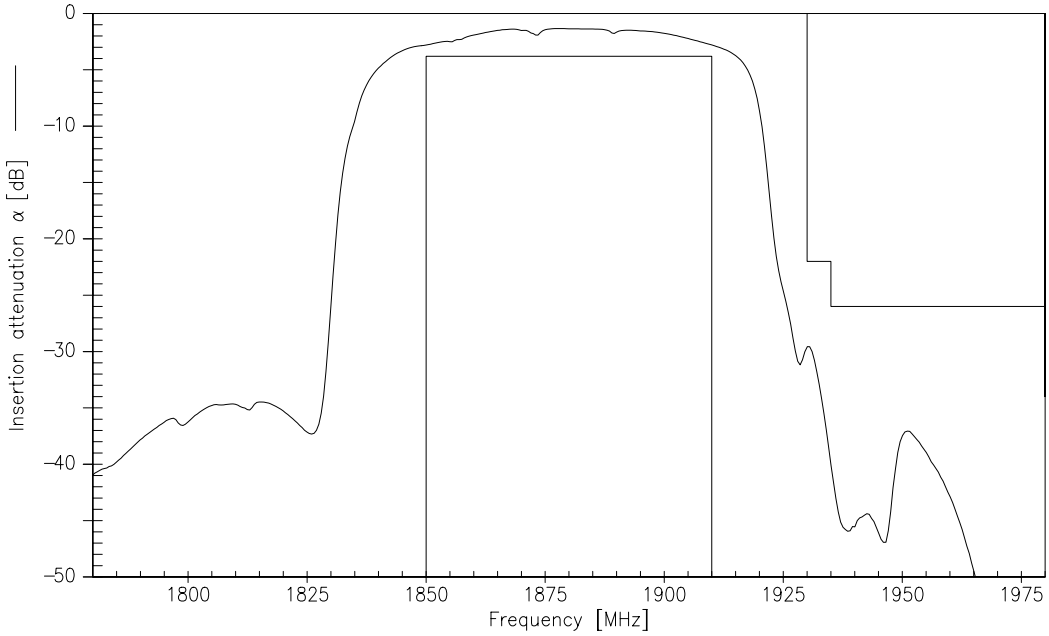
		min.	typ.	max.	
Center frequency	f_C	—	1880,0	—	MHz
Maximum insertion attenuation	α_{max}				
1850,0 ... 1910,0 MHz		—	2,9	3,8	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1850,0 ... 1910,0 MHz		—	1,5	2,5	dB
Input VSWR					
1850,0 ... 1910,0 MHz		—	1,8	2,1	
Output VSWR					
1850,0 ... 1910,0 MHz		—	1,8	2,1	
Attenuation	α				
0,0 ... 1720,0 MHz		25,0	28,0	—	dB
1930,0 ... 1935,0 MHz		22,0	25,0	—	dB
1935,0 ... 1990,0 MHz		26,0	29,0	—	dB
2032,0 ... 2092,0 MHz		34,0	36,0	—	dB
2150,0 ... 2340,0 MHz		34,0	36,0	—	dB
2340,0 ... 5000,0 MHz		20,0	26,0	—	dB

Characteristics

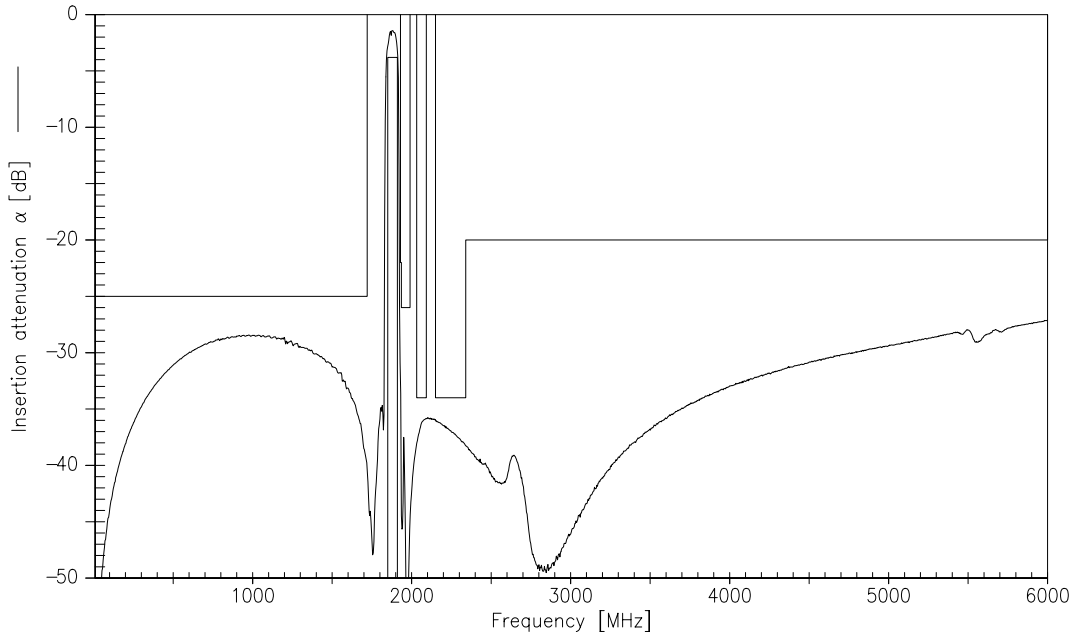
Operating Temperature Range: T = -30 to +85˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Center frequency	f_C	—	1880,0	—	MHz
Maximum insertion attenuation	α_{max}				
1850,0 ... 1910,0 MHz		—	2,9	4,7	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1850,0 ... 1910,0 MHz		—	1,5	3,4	dB
Input VSWR					
1850,0 ... 1910,0 MHz		—	1,8	2,1	
Output VSWR					
1850,0 ... 1910,0 MHz		—	1,8	2,1	
Attenuation	α				
0,0 ... 1720,0 MHz		25,0	28,0	—	dB
1930,0 ... 1935,0 MHz		18,0	25,0	—	dB
1935,0 ... 1990,0 MHz		26,0	29,0	—	dB
2032,0 ... 2092,0 MHz		34,0	36,0	—	dB
2150,0 ... 2340,0 MHz		34,0	36,0	—	dB
2340,0 ... 5000,0 MHz		20,0	26,0	—	dB

Transfer function (measurement)

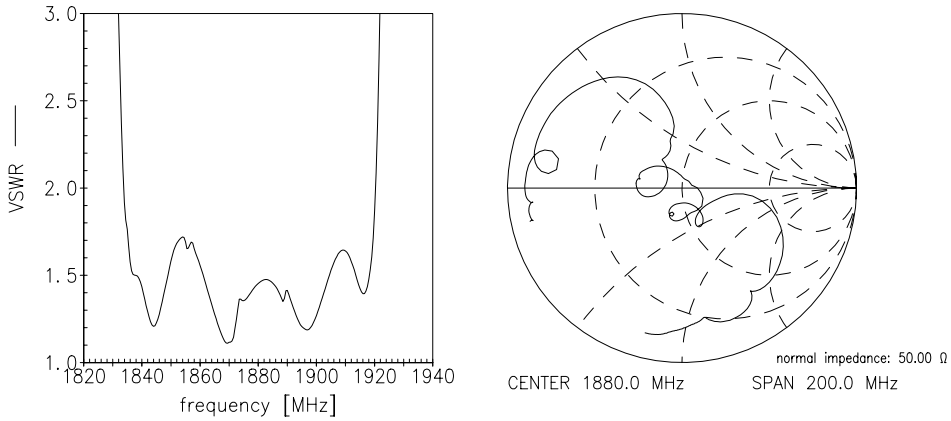


Transfer function (wideband measurement)

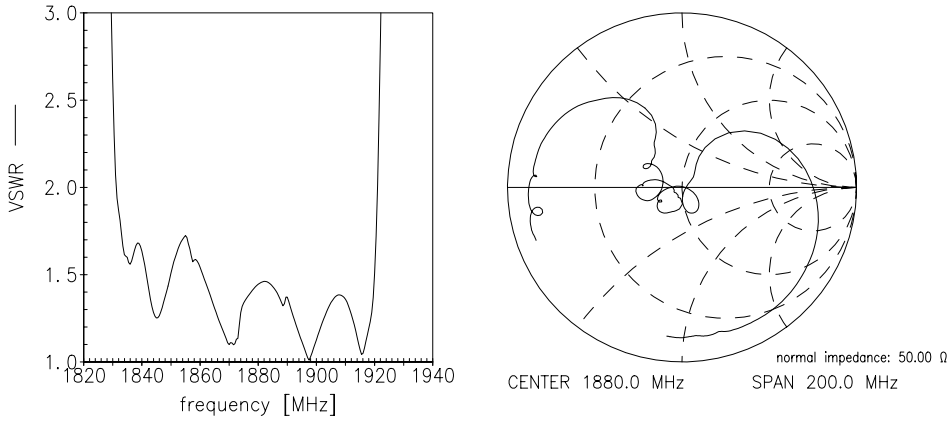


Matching (measurement)

S_{11}



S_{22}



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