



SAW Components

Data Sheet B7743

Data Sheet

An abstract graphic featuring the word "EPCOS" in large, glowing, 3D letters. The letters are white with a bright, circular highlight in the center of each, giving them a three-dimensional appearance. They are set against a dark, textured background that includes faint, glowing patterns resembling a globe and circuitry. The overall effect is high-tech and futuristic.



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Low-Loss Filter for Mobile Communication

1960,0 MHz

Data Sheet



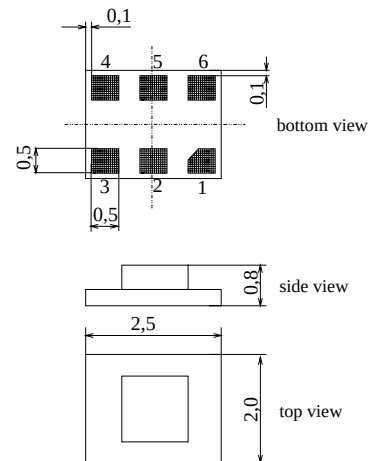
Chip Sized SAW Package DCS6P

Features

- Low-loss RF filter for mobile telephone PCS systems, receive path
- High selectivity
- Low amplitude ripple
- Usable passband 60 MHz
- Unbalanced to balanced operation
- No external matching required
- Package for **Surface Mounted Technology (SMT)**

Terminals

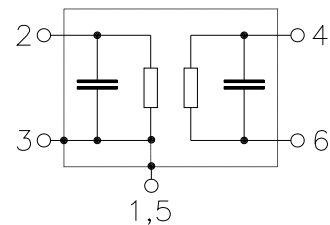
- Gold-plated Ni



Dimensions in mm, approx. weight 0,013 g

Pin configuration

- 2 Input
- 4, 6 Balanced output
- 1, 3, 5 To be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B7743	B39202-B7743-E410	C61157-A7-A101	F61074-V8153-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 30 / + 85	°C	
Storage temperature range	T_{stg}	- 40 / + 85	°C	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}	50	V	
Input power max.				
880 ... 915 MHz		13	dBm	source and load impedance 50 Ω peak power of GSM signal, duty cycle 2 : 8
1710 ... 1785 MHz	P_{IN}	13	dBm	
1850 ... 1910 MHz		13	dBm	
elsewhere		0	dBm	continuous wave



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Characteristics

Operating Temperature Range: $T = 25^{\circ}\text{C}$
Terminating source impedance: $Z_S = 50\ \Omega$ (unbalanced)
Terminating load impedance: $Z_L = 50\ \Omega$ (balanced)

		min.	typ.	max.	
Center frequency	f_C	—	1960,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$	—	2,0	2,5*	dB
1930,0 ... 1990,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,5	1,0	dB
1930,0 ... 1990,0 MHz					
Input VSWR		—	1,9	2,1	
1930,0 ... 1990,0 MHz					
Output VSWR		—	1,9	2,1	
1930,0 ... 1990,0 MHz					
Output phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^{\circ}$)		-15	—	10	$^{\circ}$
1930,0 ... 1990,0 MHz					
Output amplitude balance ($ S_{31}/S_{21} $)		-2,0	—	3,0	dB
1930,0 ... 1990,0 MHz					
Attenuation	α				
0,0 ... 1830,0 MHz		25	28	—	dB
1830,0 ... 1910,0 MHz		14	15	—	dB
2020,0 ... 2060,0 MHz		17	18	—	dB
2060,0 ... 2200,0 MHz		27	29	—	dB
2200,0 ... 2260,0 MHz		35	38	—	dB
2260,0 ... 4390,0 MHz		25	28	—	dB
4390,0 ... 6000,0 MHz		18	25	—	dB

* the insertion attenuation includes also pcb losses of typ. 0,2dB



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Characteristics

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

		min.	typ.	max.	
Center frequency	f_C	—	1960,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
1930,0 ... 1990,0 MHz		—	2,3	3,5*	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1930,0 ... 1990,0 MHz		—	1,0	1,6	dB
Input VSWR					
1930,0 ... 1990,0 MHz		—	1,9	2,1	
Output VSWR					
1930,0 ... 1990,0 MHz		—	1,9	2,1	
Output phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^{\circ}$)					
1930,0 ... 1990,0 MHz		-15	—	10	$^{\circ}$
Output amplitude balance (S_{31} / S_{21})					
1930,0 ... 1990,0 MHz		-2,0	—	3,0	dB
Attenuation	α				
0,0 ... 1830,0 MHz		25	28	—	dB
1830,0 ... 1910,0 MHz		11	12	—	dB
2020,0 ... 2060,0 MHz		15	18	—	dB
2060,0 ... 2200,0 MHz		23	26	—	dB
2200,0 ... 2260,0 MHz		35	38	—	dB
2260,0 ... 4390,0 MHz		25	28	—	dB
4390,0 ... 6000,0 MHz		18	25	—	dB

* the insertion attenuation includes also pcb losses of typ. 0,2dB



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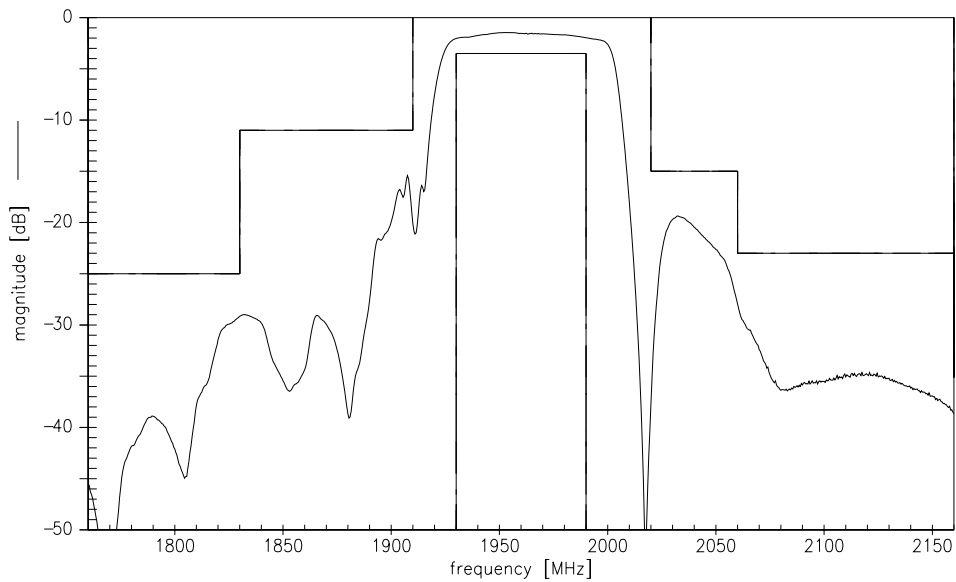
Low-Loss Filter for Mobile Communication

1960,0 MHz

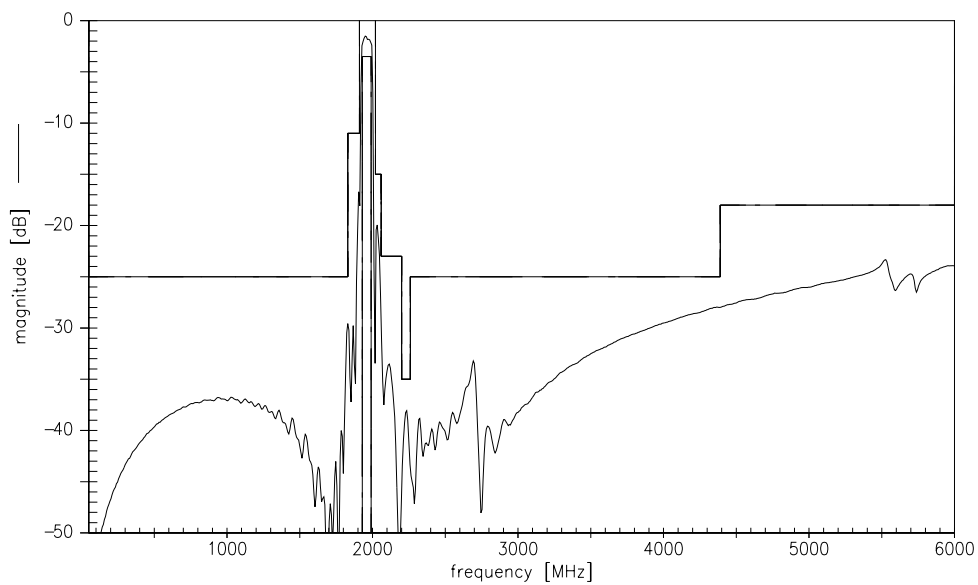
Data Sheet



Transfer function (narrow band)



Transfer function (wide band)





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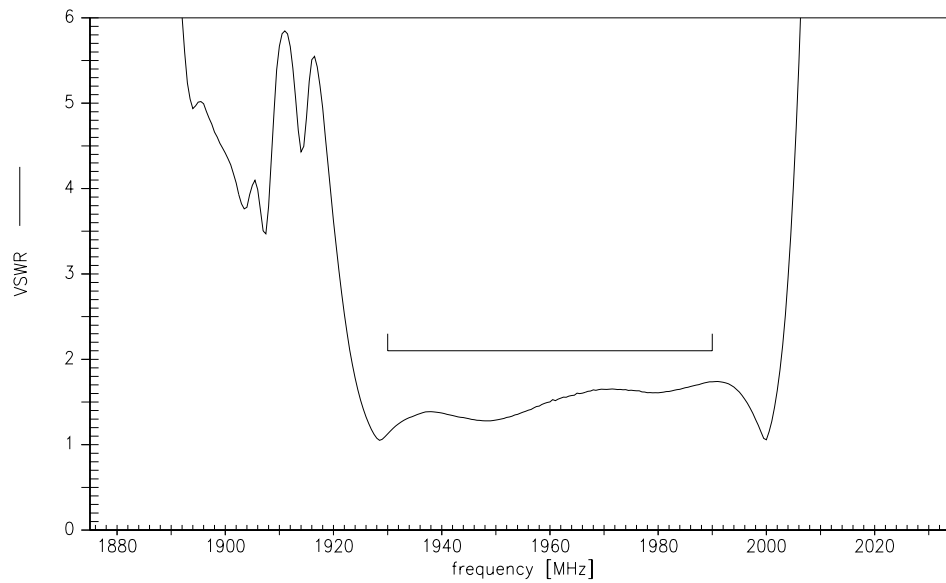
1960,0 MHz

Data Sheet

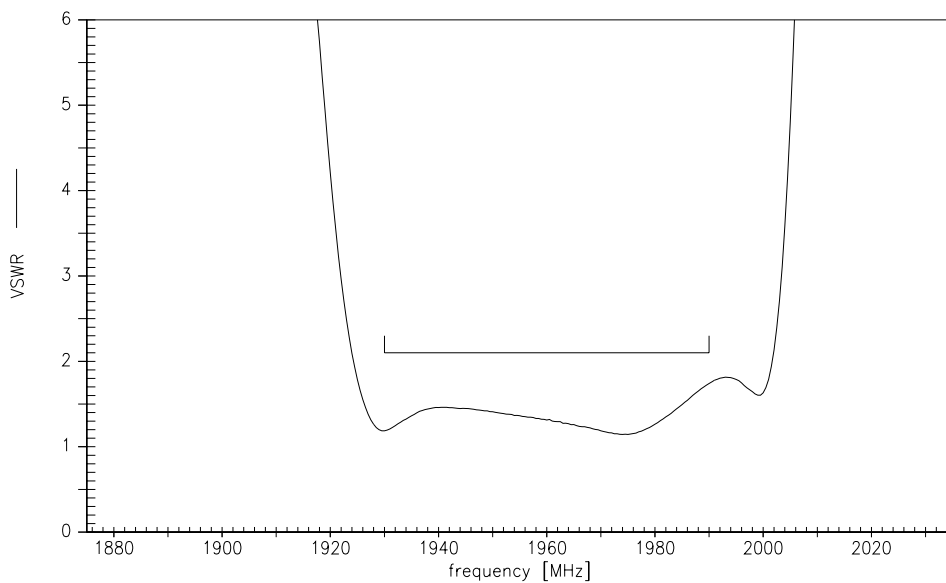


VSWR (narrow band)

Input



Output





SAW Components	B7743
Low-Loss Filter for Mobile Communication	1960,0 MHz
Data Sheet	SMD

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