



SAW Components

Data Sheet B7743





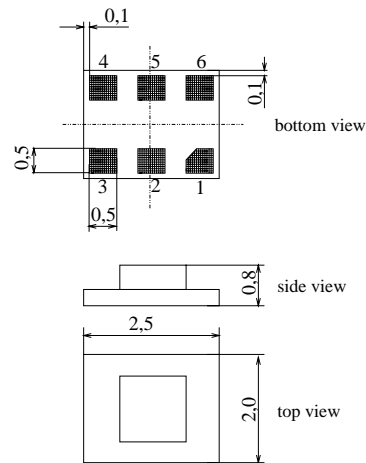
Chip Sized SAW Package DCS6P

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

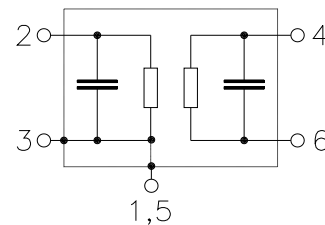
- Gold-plated Ni



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	P_{IN}	13	dBm	source and load impedance 50 Ω peak power of GSM signal, duty cycle 2 : 8
1710 ... 1785 MHz		13	dBm	
1850 ... 1910 MHz		13	dBm	
elsewhere		0	dBm	continuous wave



Data Sheet



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	α_{\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	°
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



Data Sheet



Characteristics

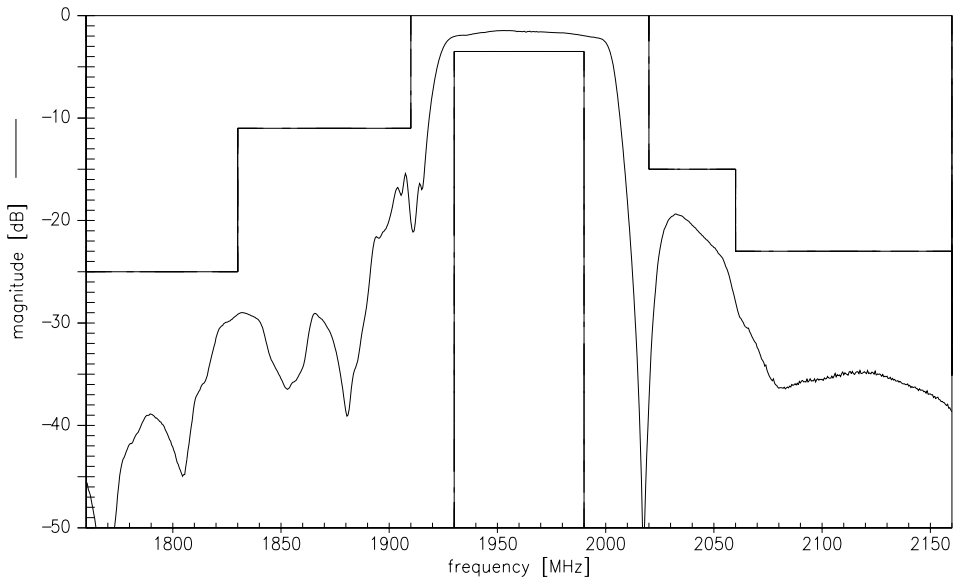
Operating Temperature Range: $T = -30$ to $+85^{\circ}\text{C}$
 Terminating source impedance: $Z_S = 50\ \Omega$ (unbalanced)
 Terminating load impedance: $Z_L = 50\ \Omega$ (balanced)

		min.	typ.	max.	
Center frequency	f_C	—	1960,0	—	MHz
Maximum insertion attenuation	α_{\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

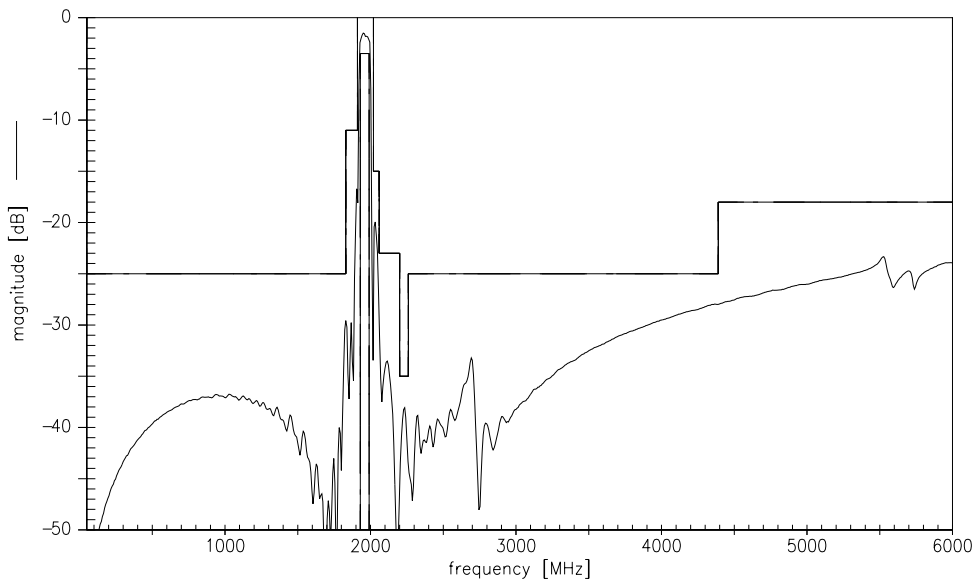
* the insertion attenuation includes also pcb losses of typ. 0,2dB



Transfer function (narrow band)



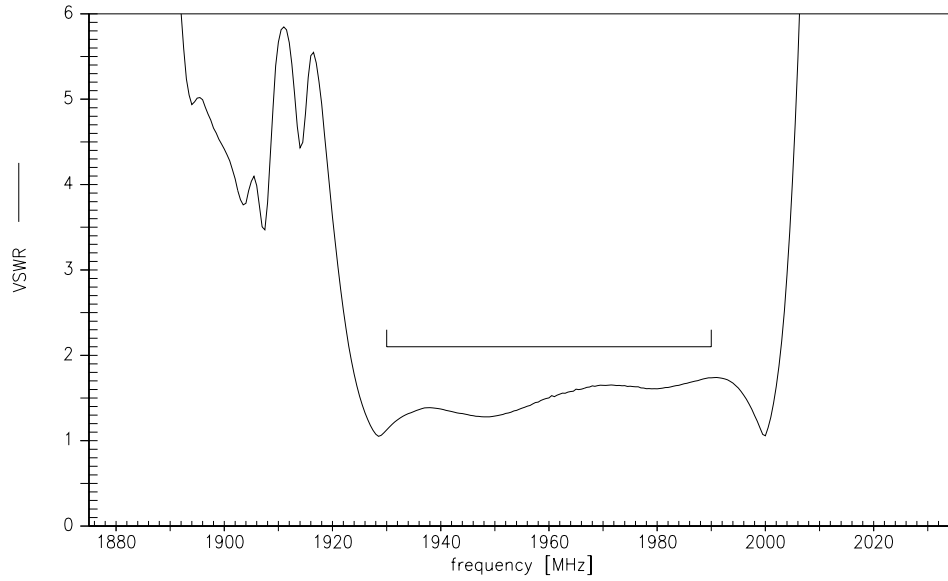
Transfer function (wide band)



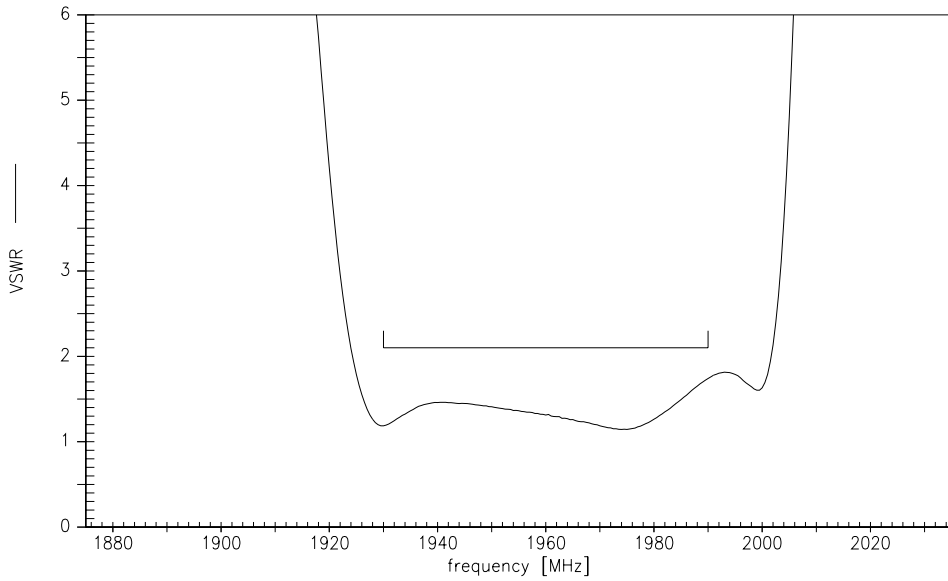


VSWR (narrow band)

Input



Output





SAW Components

B7743

Low-Loss Filter for Mobile Communication

1960,0 MHz

Data Sheet



Published by EPCOS AG

Surface Acoustic Wave Components Division, SAW MC WT

P.O. Box 80 17 09, 81617 Munich, GERMANY

© EPCOS AG 2002. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.