



SAW Components

Data Sheet B7740

Data Sheet

A large, stylized graphic of a globe is shown, with the word "EPCOS" overlaid in a large, white, sans-serif font. The globe is rendered with a grid of latitude and longitude lines, and the word "EPCOS" is positioned diagonally across the center of the globe. The background is dark and textured, giving the impression of a globe or a satellite image.



SAW Components

B7740

Low-Loss Filter for Mobile Communication

1960,0 MHz

Data Sheet



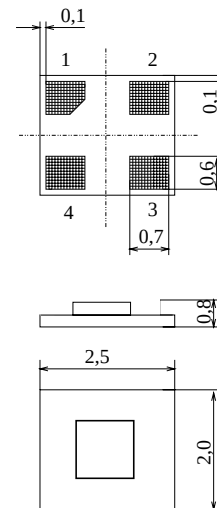
Chip Sized SAW Package DCS4D

Features

- RF filter for mobile telephone
PCS systems, receive path
- Low insertion loss, low amplitude ripple
- Usable passband 60 MHz
- Suitable for GPRS class 1 to 12
- Package for Surface Mounted
Technology (SMT)

Terminals

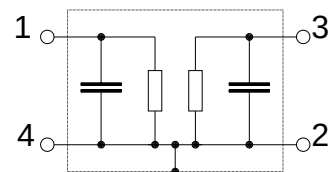
- Gold-plated Ni



Dimensions in mm, approx. weight 0,012 g

Pin configuration

- | | |
|-----|--------|
| 1 | Input |
| 3 | Output |
| 2,4 | Ground |



Type	Ordering code	Marking and Package according to	Packing according to
B7740	B39202-B7740-C810	C61157-A7-A89	F61074-V8125-Z000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operating temperature range	T	- 10/+ 80	°C	
Storage temperature range	T_{stg}	- 40/+ 85	°C	
DC voltage	V_{DC}	3	V	
ESD voltage	V_{ESD}	50	V	
Input Power at				
GSM850, GSM900	P_{IN}	15	dBm	peak power of GSM signal,
GSM1800, GSM1900	P_{IN}	12	dBm	duty cycle 4:8
tx bands				



SAW Components

B7740

Low-Loss Filter for Mobile Communication

1960,0 MHz

Data Sheet



Characteristics

Operating temperature range : $T = 25\text{ °C} \pm 2\text{ °C}$
Terminating source impedance: $Z_S = 50\ \Omega$
Terminating load impedance: $Z_L = 50\ \Omega$

		min.	typ.	max.	
Center frequency	f_C	—	1960,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$	—	2,8	3,2	dB
1930,0... 1990,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	1,3	1,7	dB
1930,0... 1990,0 MHz					
Attenuation	α				
DC ... 1500,0 MHz		28	31	—	dB
1500,0.. 1830,0 MHz		25	29	—	dB
1830,0.. 1910,0 MHz		12	14	—	dB
2010,0... 2070,0 MHz		12	14	—	dB
2070,0... 2500,0 MHz		21	23	—	dB
2500,0... 3000,0 MHz		24	28	—	dB
3000,0... 4500,0 MHz		28	35	—	dB
4500,0... 5200,0 MHz		26	32	—	dB
5200,0... 6000,0 MHz		24	30	—	dB
Input vswr		---	2,2	2,3	
1930,0... 1990,0 MHz					
Output vswr		---	2,2	2,3	
1930,0... 1990,0 MHz					
Tx band suppression	α	12	14	—	dB
1830,0.. 1910,0 MHz					



SAW Components

B7740

Low-Loss Filter for Mobile Communication

1960,0 MHz

Data Sheet



Characteristics

Operating temperature range :

$T = -10$ to $+80$ °C

Terminating source impedance:

$Z_S = 50 \Omega$

Terminating load impedance:

$Z_L = 50 \Omega$

		min.	typ.	max.	
Center frequency	f_C	—	1960,0	—	MHz
Maximum insertion attenuation	$\alpha_{\max}$				
1930,0... 1990,0 MHz		—	2,8	3,2	dB
Amplitude ripple (p-p)	$\Delta\alpha$				
1930,0... 1990,0 MHz		—	1,3	1,7	dB
Attenuation	α				
DC ... 1500,0 MHz		28	31	—	dB
1500,0.. 1830,0 MHz		25	29	—	dB
1830,0.. 1910,0 MHz		10	13	—	dB
2010,0... 2070,0 MHz		10	13	—	dB
2070,0... 2500,0 MHz		21	23	—	dB
2500,0... 3000,0 MHz		24	28	—	dB
3000,0... 4500,0 MHz		28	35	—	dB
4500,0... 5200,0 MHz		26	32	—	dB
5200,0... 6000,0 MHz		24	30	—	dB
Input vswr					
1930,0... 1990,0 MHz		---	2,2	2,3	
Output vswr					
1930,0... 1990,0 MHz		---	2,2	2,3	
Tx band suppression	α				
1830,0.. 1910,0 MHz		10	13	—	dB



SAW Components

B7740

Low-Loss Filter for Mobile Communication

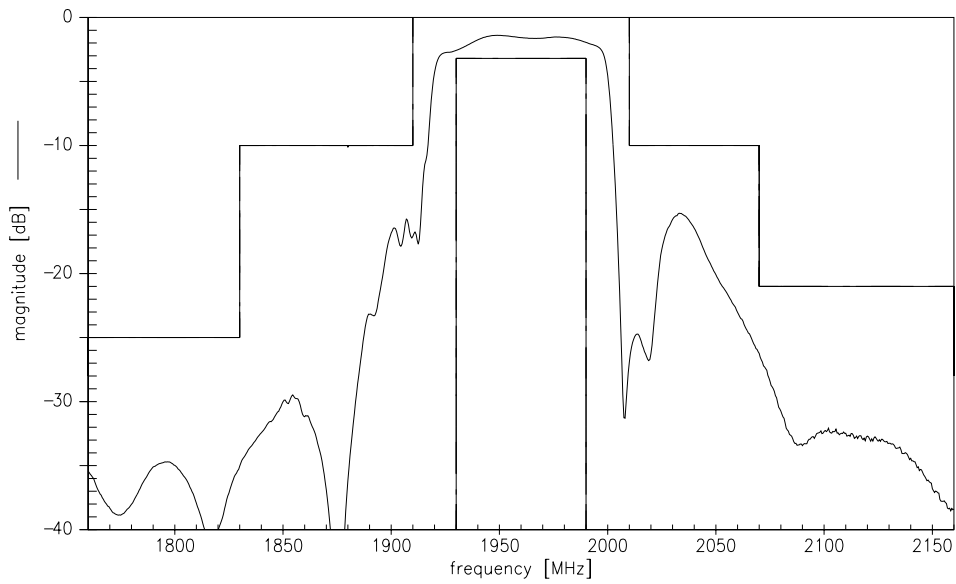
1960,0 MHz

Data Sheet

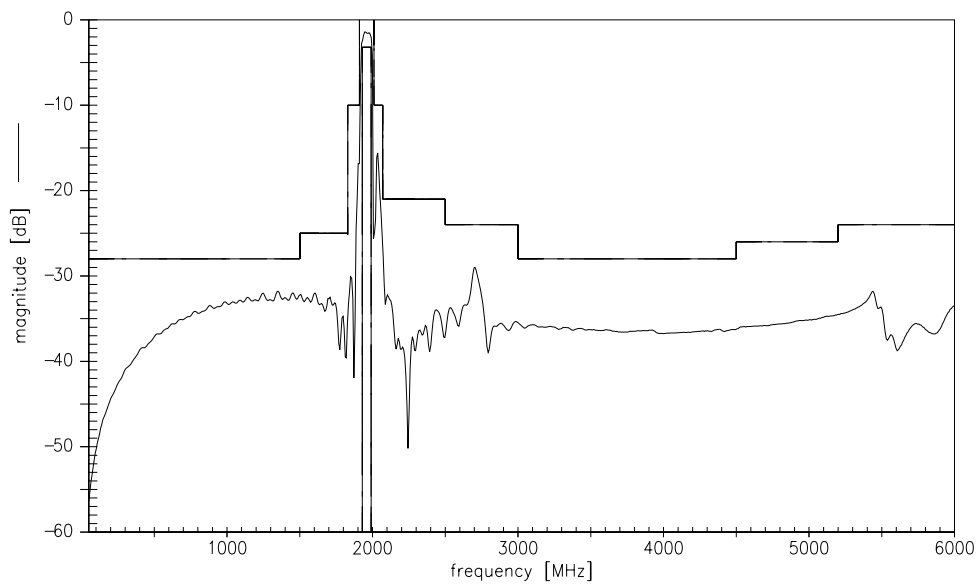


Transfer function

narrow band



wide band





SAW Components

B7740

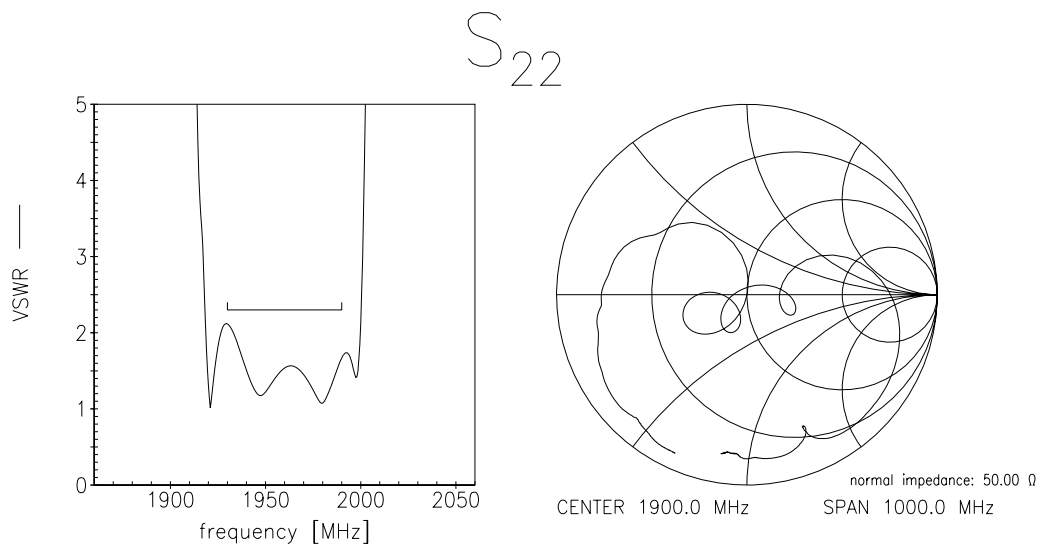
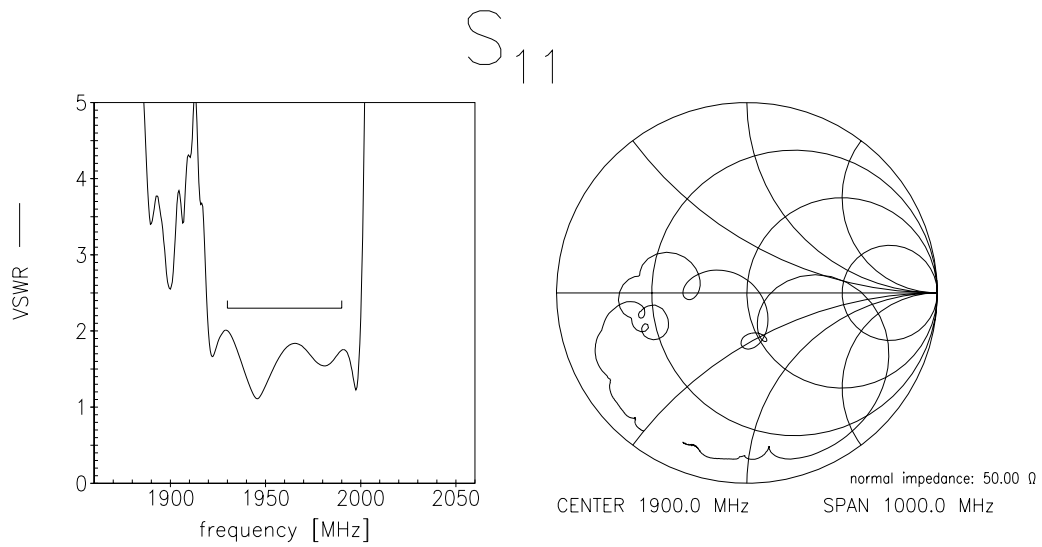
Low-Loss Filter for Mobile Communication

1960,0 MHz

Data Sheet



Reflection functions





SAW Components

B7740

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.