⚡TDK

SAW Mobile Communications

Series/Type: B7740

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39202B7740C810	B39202B9008E610	06.07.2007	31.01.2008	30.04.2008

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.

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SAW Components	**B7740**
Low-Loss Filter for Mobile Communication	**1960,0 MHz**

Data Sheet   SMD

Chip **S**ized **S**AW **P**ackage **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
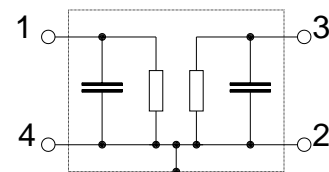- Package for Surface Mounted Technology (SMT)

Terminals
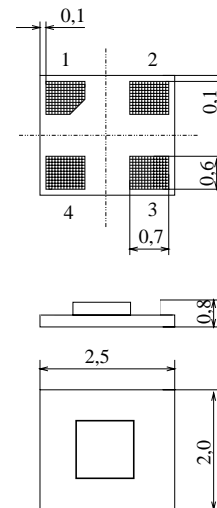
- Gold-plated Ni

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 **S**ensitive **D**evice (**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   ⬚SMD⬚

Characteristics

Operating temperature range : T = 25 ˚C +/-2 ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

				min.	typ.	max.	
Center frequency			f_C	—	1960,0	—	MHz
Maximum insertion attenuation			α_{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		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							
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		12	14	—	dB

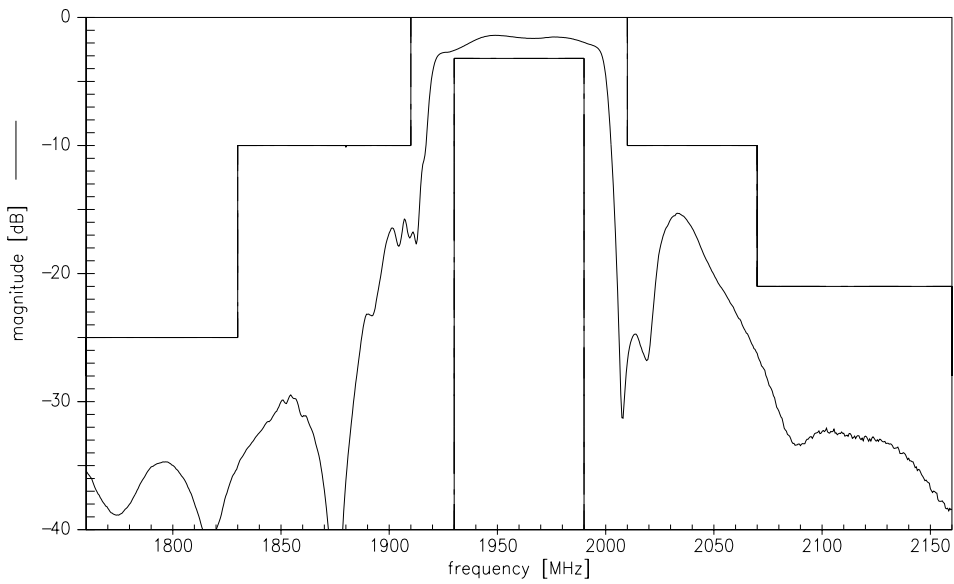| SAW Components	B7740
Low-Loss Filter for Mobile Communication	**1960,0 MHz**

Data Sheet

Characteristics

Operating temperature range : T = -10 to +80 ˚C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

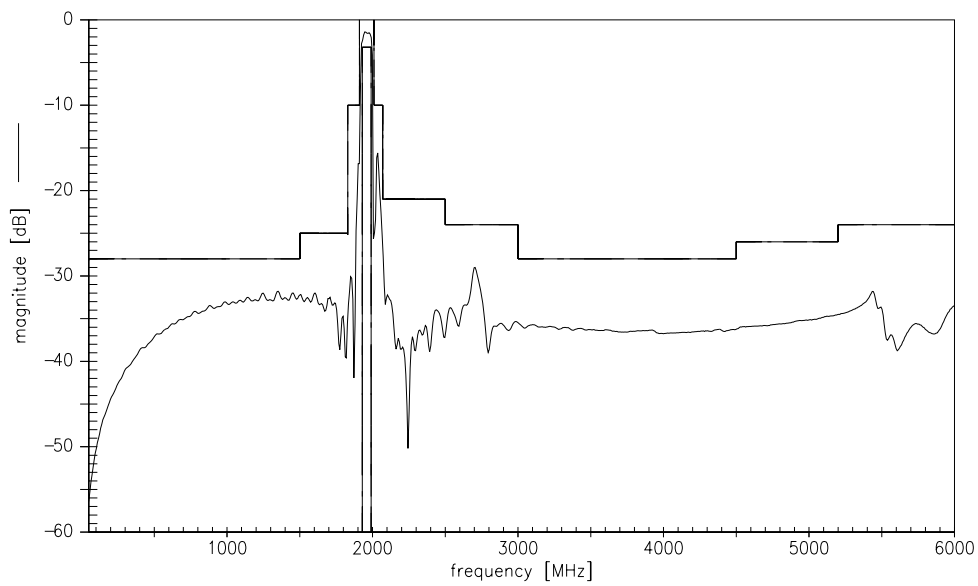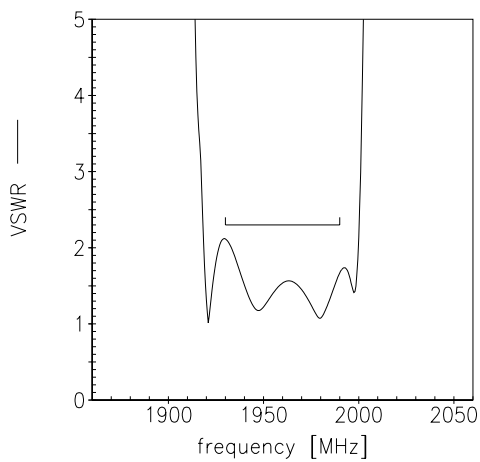|			min.	typ.	max.	
Center frequency		f_C	—	1960,0	—	MHz
Maximum insertion attenuation		α_{max}				
1930,0...	1990,0 MHz		—	2,8	3,2	dB
Amplitude ripple (p-p)		$\Delta\alpha$				
1930,0...	1990,0 MHz		—	1,3	1,7	dB
Attenuation		α				
DC ...	1500,0 MHz		28	31	—	dB
1500,0..	1830,0 MHz		25	29	—	dB
1830,0..	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

Transfer function

narrow band

wide band

Reflection functions

S_{11}
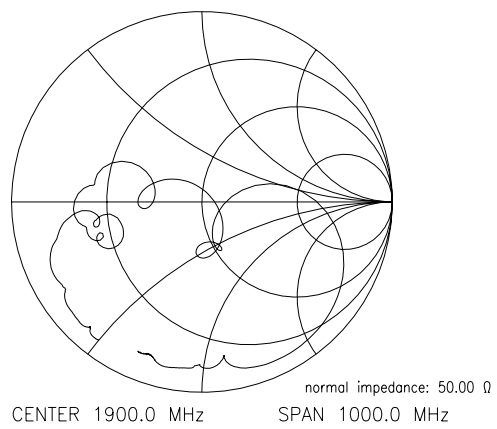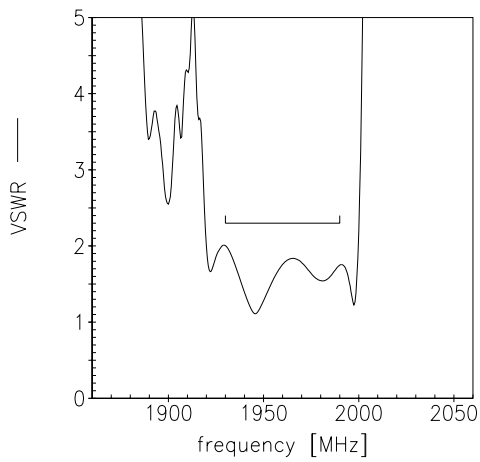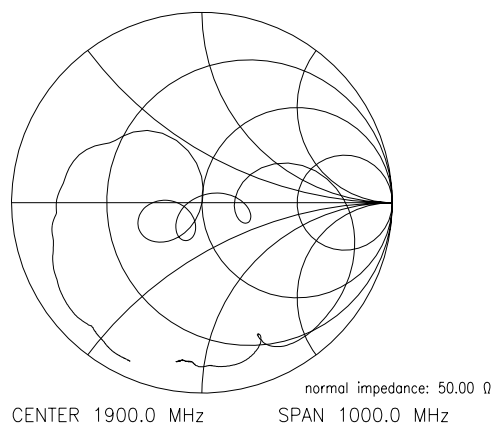
normal impedance: 50.00 Ω

CENTER 1900.0 MHz   SPAN 1000.0 MHz

S_{22}

normal impedance: 50.00 Ω

CENTER 1900.0 MHz   SPAN 1000.0 MHz

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Data Sheet SMD

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.

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