

#### RF Filters for Cellular Phones

The following products presented in this data sheet are being withdrawn.

Ordering Code			Deadline Last Orders	Last Shipments
B39192B7759C810	B39192B9014E910	2006-12-01	2007-02-28	2007-05-31

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Data Sheet B7759





B7759

#### **Low-Loss Filter for Mobile Communication**

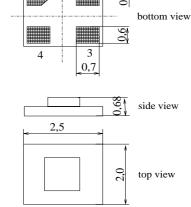
1880,0 MHz

**Data Sheet** 



#### **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 Surface Mounted Technology (SMT)



Chip Sized SAW Package DCS4D

0,1

1

#### **Terminals**

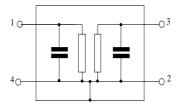
■ Gold-plated Ni

Dimensions in mm, approx. weight 0,012g

#### Pin configuration

1 Input 3 Output

2, 4 To be grounded



Туре	Ordering code	Marking and Package according to	Packing according to
B7759	B39192-B7759-C810	C61157-A7-A118	F61074-V8153-Z000

Electrostatic Sensitive Device (ESD)

#### **Maximum ratings**

			,	
Operating temperature range	Τ	<b>–</b> 30 /+ 85	°C	
	_			
Storage temperature range	$T_{stg}$	– 40 /+ 85	°C	
• •	\	E0*	\/	Machine Madel 10 pulses
ESD voltage	VESD	50*	V	Machine Model, 10 pulses
Input Power max.	P	12	dBm	source impedance 50 $\Omega$
input i owei max.	$P_{IN}$	12	UDIII	Source impedance 30 22

<sup>\*</sup> acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses



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#### **Low-Loss Filter for Mobile Communication**

1880,0 MHz

**Data Sheet** 

Characteristics

Operating Temperature Range:  $T=25\pm2^{\circ}\mathrm{C}$  Terminating source impedance:  $Z_{\mathrm{S}}=50~\Omega$  Terminating load impedance:  $Z_{\mathrm{L}}=50~\Omega$ 

		min.	typ.	max.	
Center frequency	$f_{\mathbb{C}}$	_	1880,0	_	MHz
Maximum insertion attenuation	$\alpha_{\sf max}$				
1850,0 1910,0MHz		_	2,9	3,5	dB
Amplitude ripple (p-p)	$\Delta \alpha$				
1850,0 1910,0MHz		_	1,3	1,9	dB
Attenuation	α				
DC 1720,0MHz		29	31	_	dB
1720,0 1770,0MHz		29	33	_	dB
1770,0 1830,0MHz		18	25	_	dB
1930,0 1990,0MHz		35	42	_	dB
1990,0 2032,0MHz		33	37	_	dB
2032,0 2456,0MHz		35	40	_	dB
2456,0 3820,0MHz		25	28	_	dB
3820,0 5000,0MHz		15	21	_	dB
Input return loss					
1850,0 1910,0MHz		10	11	_	dB
Output return loss					
1850,0 1910,0MHz		10	11	_	dB



B7759

#### **Low-Loss Filter for Mobile Communication**

1880,0 MHz

**Data Sheet** 

#### Characteristics

Operating Temperature Range:  $T = -30 \text{ to } +85^{\circ}\text{C}$ 

Terminating source impedance:  $Z_{\rm S} = 50 \ \Omega$ Terminating load impedance:  $Z_{\rm L} = 50 \ \Omega$ 

		min.	typ.	max.	
Center frequency	f <sub>C</sub>	_	1880,0	_	MHz
Maximum insertion attenuation	$\alpha_{max}$				
1850,0 1910,0MHz		_	3,9	4,8	dB
1850,625 1909,375MHz		_	3,7	4,5	dB
Amplitude ripple (p-p)	$\Delta \alpha$				
1850,0 1910,0MHz		_	2,4	3,0	dB
1850,625 1909,375MHz		_	2,2	2,8	dB
Attenuation	α				
DC 1720,0MHz		29	31	_	dB
1720,0 1770,0MHz		29	33	_	dB
1770,0 1830,0MHz		10	15	_	dB
1930,0 1990,0MHz		27	35	_	dB
1930,625 1989,375MHz		30	36	_	dB
1990,0 2032,0MHz		33	37	_	dB
2032,0 2456,0MHz		35	40	_	dB
2456,0 3820,0MHz		25	28	_	dB
3820,0 5000,0MHz		15	21	_	dB
Input return loss					
1850,0 1910,0MHz		9	10	_	dB
Output return loss					
1850,0 1910,0MHz		9	10	_	dB

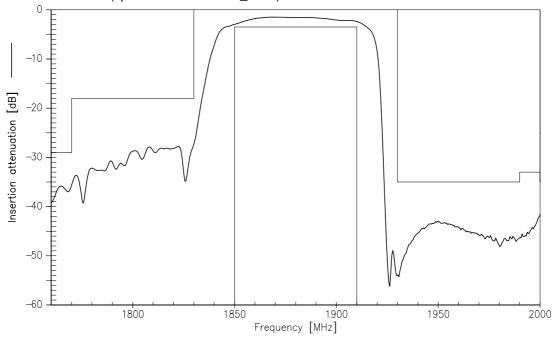


**Low-Loss Filter for Mobile Communication** 

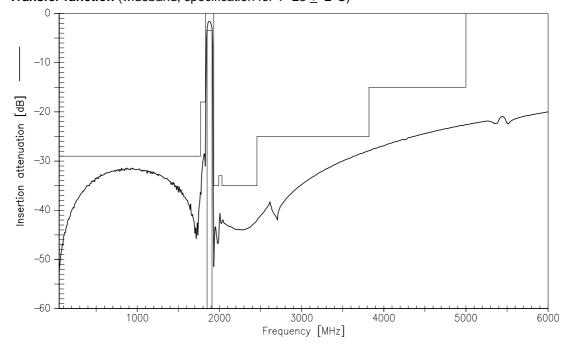
1880,0 MHz

**Data Sheet** 

Transfer function (specification for T=25 ± 2°C)



#### Transfer function (wideband, specification for T=25 ± 2°C)





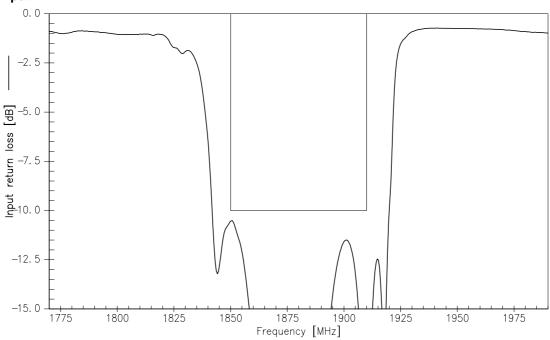
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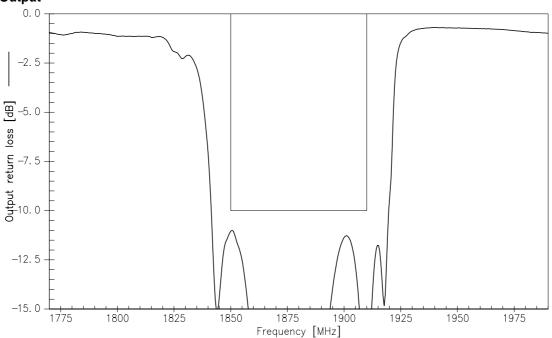
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### **Matching** (specification for $T=25 \pm 2^{\circ}C$ )

#### Input



### Output





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1880,0 MHz

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