

Data Sheet B7802





B7802

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

1880,00 MHz

**Data Sheet** 



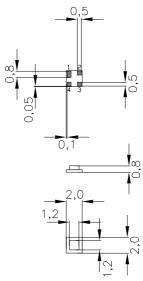
#### **Features**

- Low-loss RF filter for mobile telephone PCS system, transmit path
- Usable passband 60 MHz
- $\blacksquare$  No matching network required for operation at 50  $\Omega$
- Package for Surface Mounted Technology (SMT)

#### **Terminals**

■ Ni, gold-plated

## Chip sized SAW package DCS4A



Dimensions in mm, approx. weight 0,01g

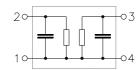
## Pin configuration

2 Input

1 Input - ground

3 Output

4 Output - ground



Туре	Ordering code	Marking and Package according to	Packing according to			
B7802	B39192-B7802-A510	C61157-A7-A63	F61074-V8154-Z000			

Electrostatic Sensitive Device (ESD)

#### **Maximum ratings**

Operable temperature range	T	<b>- 40 / + 85</b>	°C	
Storage temperature range	$T_{stg}$	<b>- 40 / + 85</b>	°C	
DC voltage	$V_{\rm DC}$	0	V	
Input power max.				source and impedance 50 $\Omega$
	$P_{IN}$	10	dBm	peak power of GSM signal,
			ın.	duty cycle 1:3
		8	dBm	CDMA signal



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Characteristics

Operating temperature range: T = +25 + -2 °C $\begin{array}{ll} Z_{\rm S} &= 50~\Omega \\ Z_{\rm L} &= 50~\Omega \end{array}$ Terminating source impedance:

Terminating load impedance:

					min.	typ.	max.	
Center frequency				$f_{\mathbb{C}}$	_	1880,00	_	MHz
Maximum insertion attenuation		$\alpha_{max}$						
185	50,0	1910,0	MHz			3,0	3,6	dB
Amplitude ripple (p-p)			Δα					
185	50,0	1910,0	MHz		_	1,5	2,1	dB
IVSWR								
185	50,0	1910,0	MHz		_	2,0	2,2	
Attenuation				α				
•	10,0	950,0	MHz		15,0	17,0	_	dB
95	50,0	1050,0	MHz		14,0	15,0	_	dB
105	50,0	1580,0	MHz		16,0	18,0	_	dB
158	30,0	1720,0	MHz		25,0	28,0	_	dB
172	20,0	1780,0	MHz		21,0	23,0	_	dB
178	30,0	1800,0	MHz		18,0	20,5	_	dB
180	0,00	1830,0	MHz		10,0	20,0	_	dB
193	30,0	1990,0	MHz		15,0	24,0	_	dB
199	90,0	2400,0	MHz		25,0	28,0	_	dB
240	0,00	2800,0	MHz		20,0	24,0	_	dB
280	0,00	3500,0	MHz		15,0	18,0	_	dB
25/	0,00	6000,0	MHz		13,0	15,0		dB



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Characteristics

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

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

		min.	typ.	max.	
Center frequency	$f_{\mathbb{C}}$	_	1880,00	_	MHz
Maximum insertion attenuation	$\alpha_{\text{max}}$				
1850,01910,0 MI	Hz	_	3,2	4,3	dB
Amplitude ripple (p-p)	Δα				
1850,01910,0 MI	Hz	_	1,8	2,8	dB
IVSWR					
1850,01910,0 MI	Hz	_	2,0	2,2	
Attenuation	α				
10,0 950,0 MI	Hz	15,0	17,0	_	dB
950,01050,0 MI	Hz	14,0	15,0	_	dB
1050,01580,0 MI	Hz	16,0	18,0	_	dB
1580,01720,0 MI	Hz	25,0	28,0		dB
1720,01780,0 M	Hz	21,0	23,0		dB
1780,01800,0 MI	Hz	18,0	20,5		dB
1800,01830,0 MI	Hz	6,0	16,0		dB
1930,01990,0 M	Hz	10,0	19,0		dB
1990,02400,0 MI	Hz	25,0	28,0	_	dB
2400,02800,0 MI	Hz	20,0	24,0	_	dB
2800,03500,0 MI	Hz	15,0	18,0	_	dB
3500,06000,0 MI	Hz	13,0	15,0	_	dB

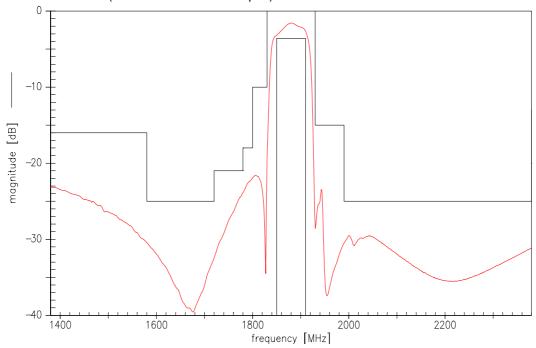


SAW Components B7802
Low-Loss Filter for Mobile Communication 1880,00 MHz

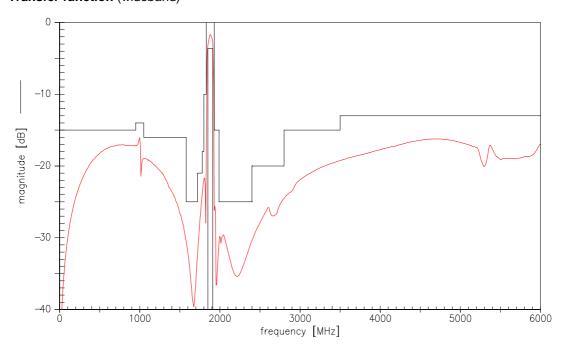
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#### Transfer function (narrowband with 25°C spec)



## Transfer function (wideband)





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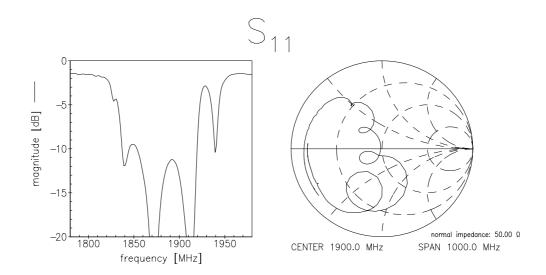
1880,00 MHz

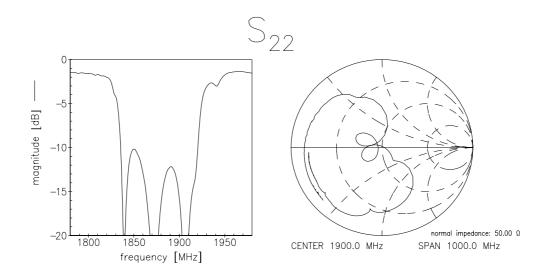
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#### Matching (measurement)







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