

# SAW filters for mobile communications

Series/Type: B7754

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product		Deadline Last Orders	Last Shipments
B39202B7754C810	B39202B9031E910	2008-03-14	2008-08-31	2008-10-15

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B7754

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

1950,0 MHz

**Data Sheet** 

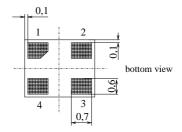


#### **Features**

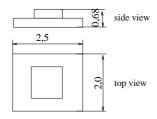
- Low-loss RF filter for W-CDMA mobile telephone system, transmit path
- High stopband attenuation
- Usable passband 60 MHz
- Unbalanced/unbalanced operation
- Package size: 2 mm x 2.5 mm (4 pin, diagonal pinning)

#### **Terminals**

Ni, gold-plated



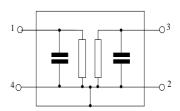
Chip sized SAW package DCS4D



Dimensions in mm, approx weight 0,012g

#### Pin configuration

1 Input 3 Output 2,4 Ground



Туре	Ordering code	Marking and Package according to	Packing according to
B7754	B39202-B7754-C810	C61157-A7-A118	F61074-V8153-Z000

Electrostatic Sensitive Device (ESD)

#### **Maximum ratings**

Operable temperature range	T	<b>- 20 / + 85</b>	°C	
Storage temperature range	$T_{\rm stg}$	<b>- 40 / + 85</b>	°C	
DC voltage	$V_{\rm DC}$	3	V	
Source power	$P_{s}$	10	dBm	source impedance 50 Ω



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# Characteristics

Operating temperature range:  $T = +25 \degree C \pm 2 \degree C$ 

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

			min.	typ.	max.	
Center frequency		$f_{\mathbb{C}}$	_	1950,0	_	MHz
Maximum insertion	n attenuation	$\alpha_{\sf max}$				
	1920,0 1980,0 ľ	MHz	_	2,2	2,5	dB
Ripple		р-р				
	1920,0 1980,0 ľ	MHz	_	1,0	1,2	dB
Input VSWR						
Output VSWR	1920,0 1980,0 MF	∃z	_	1,9	2,1	
	1920,0 1980,0 MF	Нz	_	1,9	2,1	
Attenuation		α				
	0,01670,0	MHz	26	28	_	dB
	1670,01720,0	MHz	29	31	_	dB
	1720,01750,0	MHz	30	32	_	dB
	1750,01880,0	MHz	31	33	_	dB
	2025,02050,0	MHz	35	45	_	dB
	2110,02170,0	MHz	34	36	_	dB
	2300,02490,0	MHz	34	36	_	dB
	2490,02740,0	MHz	35	38	_	dB
	2740,03960,0	MHz	30	33	_	dB
	3960,06000,0	MHz	15	21	_	dB



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# Characteristics

Operating temperature range: T = -20 to +85 °C

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

					min.	typ.	max.	
Center frequency				$f_{\mathbb{C}}$	_	1950,0	_	MHz
Maximum insertion attenuation		$\alpha_{\text{max}}$		0.4		15		
	1920,	0 1980,0	MHZ		_	2,4	2,8	dB
Ripple				p-p				
	1920,	0 1980,0	MHz		<del>-</del>	1,0	1,6	dB
Input VSWR								
Output VSWR	1920,0	1980,0 N	lHz		_	2,0	2,2	
Output VOVIK	1920,0	1980,0 N	lHz		_	2,0	2,2	
Attenuation				α				
	0,0	1670,0	MHz		26	28	_	dB
	1670,0	1720,0	MHz		29	31	_	dB
	1720,0	1750,0	MHz		30	32	_	dB
	1750,0	1880,0	MHz		31	33	_	dB
	•	2050,0	MHz		35	45	_	dB
	•	2170,0	MHz		34	36	_	dB
	2300,0	2490,0	MHz		34	36	_	dB
	2490,0	2740,0	MHz		35	38	_	dB
	2740,0	3960,0	MHz		30	33	_	dB
	3960,0	6000,0	MHz		15	21	_	dB



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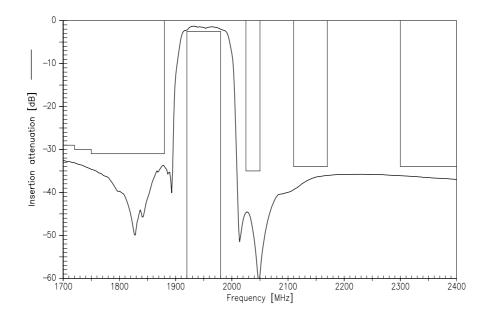
**Low-Loss Filter for Mobile Communication** 

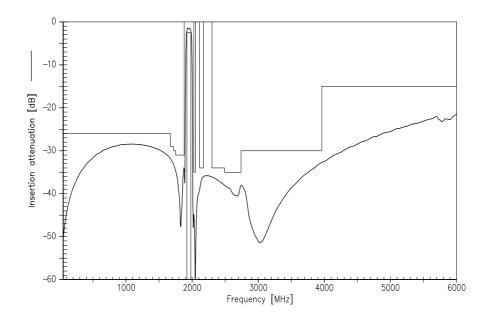
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**Data Sheet** 



Transfer function (spec for 25°C  $\pm$  2 °C):







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**Data Sheet** 



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