

## **SAW Components**

SAW filter W-CDMA

Series/type: B7750

Ordering code: B39212B7750C810

Date: September 11, 2008

Version: 2.0

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SAW Components B7750

SAW filter 2140.00 MHz

**Data sheet** 



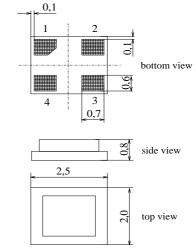
### **Application**

- RF filter for mobile telephone UMTS systems, receive path
- Low insertion loss, low amplitude ripple
- Usable passband 60 MHz



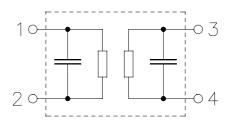
#### **Features**

- Package size 2.5 x2.0 x 0.8 mm<sup>3</sup>
- Package code DCS4D
- RoHS compatible
- Approximate weight 0.012 g
- Package for Surface Mount Technology (SMT)
- Ni, gold-plated terminals
- Electrostatic Sensitive Device (ESD)



## Pin configuration

- 1 Input
- 3 Output
- 2,4 Ground



Please read *cautions and warnings and important notes* at the end of this document.

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### **Characteristics**

Temperature range for specification:  $T = -20 \text{ to } +85 \text{ }^{\circ}\text{C}$ 

Terminating source impedance:  $Z_S = 50 \Omega$ Terminating load impedance:  $Z_L = 50 \Omega$ 

	min.	typ. @ 25 °C	max.	
Center frequency f <sub>C</sub>	; –	2140.0	_	MHz
	max			
2110.0 2170.0 MHz	<del>-</del>	2.6	2.8	dB
Amplitude ripple (p-p) Δα	α			
2110.0 2170.0 MHz	-	0.8	1.0	dB
Input VSWR				
2110.0 2170.0 MHz	<u>-</u>	2.2	2.4	
Output VSWR				
2110.0 2170.0 MHz	<u>-</u>	2.2	2.4	
Absolute Attenuation $\alpha$				
0.0 1500.0 MHz	40	42	_	dB
1500.0 1880.0 MHz	35	40	_	dB
1920.0 1980.0 MHz	34	36	_	dB
2025.0 2050.0 MHz	20	25		dB
2205.0 2265.0 MHz	10	20	_	dB
2230.0 2260.0 MHz	22	24	_	dB
2300.0 2360.0 MHz	33	38	_	dB
2490.0 2550.0 MHz	37	43	_	dB
2870.0 2930.0 MHz	31	35	_	dB
4000.0 6000.0 MHz	20	31	_	dB



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## **Maximum ratings**

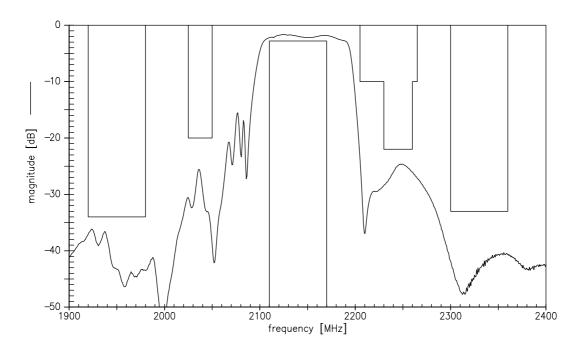
Operable temperature range	Т	-20/+85	°C	
Storage temperature range	$T_{stg}$	-40/+85	°C	
DC voltage	$V_{DC}$	3	V	
ESD voltage	$V_{ESD}$	50 <sup>1)</sup>	V	machine model, 1 pulse
Input power max				
	$P_{IN}$	13	dBm	source and load impedance $50\Omega$

<sup>1)</sup> acc. to JESD22-A115A (machine model), 1 negative & 1 positive pulse.

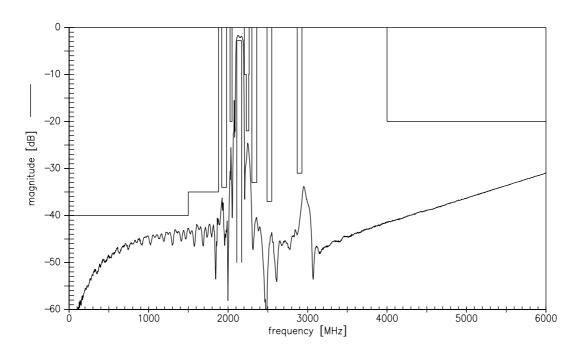


# SAW Components B7750 SAW filter 2140.00 MHz Data sheet

## Data sheet Transfer function



## Transfer function (wideband)



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SAW Components B7750

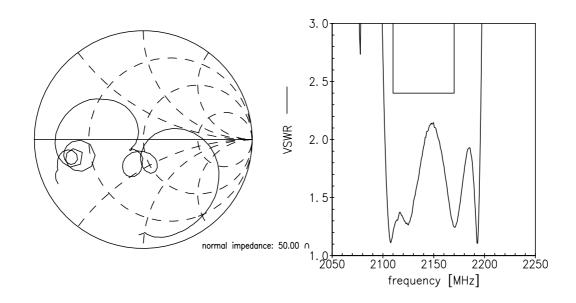
SAW filter 2140.00 MHz

**Data sheet** 

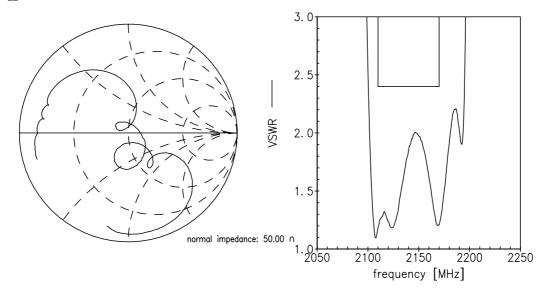
SMD

**Smith charts** 

S<sub>11</sub> function



## S<sub>22</sub> function



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**Data sheet** 



#### References

Туре	B7750
Ordering code	B39212B7750C810
Marking and package	C61157-A7-A118
Packaging	F61074-V8153-Z000
Date codes	L_1126
S-parameters	B7750_NB.s3p B7750_WB.s3p see file header for port/pin assignment table
Soldering profile	S_6001
RoHS compatible	defined as compatible with the following documents: "DIRECTIVE 2002/95/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment. 2005/618/EC from April 18th, 2005, amending Directive 2002/95/EC of the European Parliament and of the Council for the purposes of establishing the maximum concentration values for certain hazardous substances in electrical and electronic equipment."

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