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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



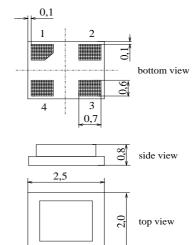
Application

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



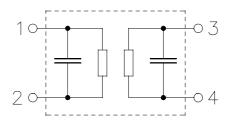
Features

- Package size 2.5 x2.0 x 0.8 mm³
- 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





SAW Components B7750

SAW filter 2140.00 MHz

Data sheet

=M \square

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 _C	_	2140.0	_	MHz
Maximum insertion attenuation	α_{max}				
2110.0 2170.0 MH		_	2.6	2.8	dB
Amplitude ripple (p-p)	$\Delta \alpha$				
2110.0 2170.0 MH	Z	_	0.8	1.0	dB
Input VSWR					
2110.0 2170.0 MH	Z		2.2	2.4	
Output VSWR					
2110.0 2170.0 MH	Z	_	2.2	2.4	
Absolute Attenuation	α				
0.0 1500.0 MH	Z	40	42	_	dB
1500.0 1880.0 MH	Z	35	40	_	dB
1920.0 1980.0 MH	Z	34	36	_	dB
2025.0 2050.0 MH	Z	20	25		dB
2205.0 2265.0 MH	Z	10	20	_	dB
2230.0 2260.0 MH	Z	22	24	_	dB
2300.0 2360.0 MH	Z	33	38	_	dB
2490.0 2550.0 MH	Z	37	43	_	dB
2870.0 2930.0 MH		31	35	_	dB
4000.0 6000.0 MH	Z	20	31	_	dB



SAW Components		B7750
SAW filter		2140.00 MHz
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Maximum ratings

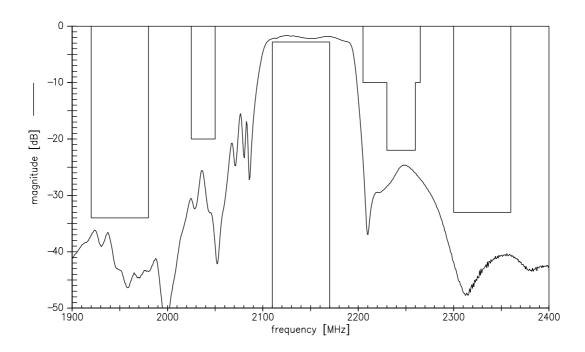
Operable temperature range	T	-20/+85	°C	
Storage temperature range	T_{stg}	-40/+85	°C	
DC voltage	V_{DC}	3	V	
ESD voltage	V_{ESD}	50 ¹⁾	V	machine model, 1 pulse
Input power max				
	P_{IN}	13	dBm	source and load impedance 50Ω

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

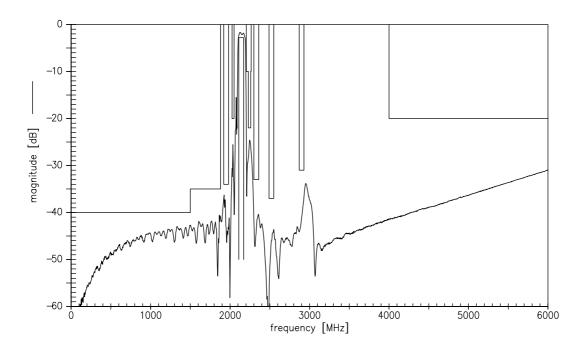


SAW Components		B7750
SAW filter		2140.00 MHz
Data sheet	=MD	

Transfer function



Transfer function (wideband)



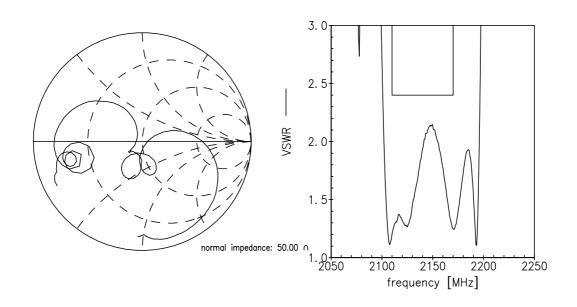


SAW Components B7750
SAW filter 2140.00 MHz

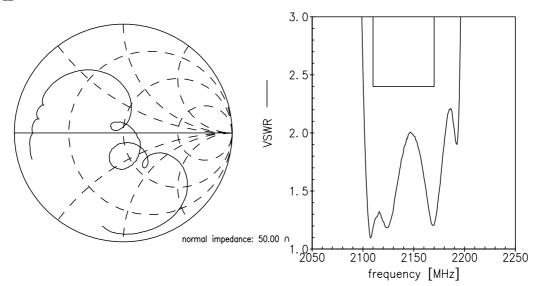
Data sheet

Smith charts

S₁₁ function



S₂₂ function





SAW Components		B7750
SAW filter		2140.00 MHz
Data sheet	SMD	

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."

For further information please contact your local EPCOS sales office or visit our webpage at www.epcos.com .

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