

SAW Components

SAW Rx Filter WCDMA Diversity Band I Rx

Series/type: Ordering code:

B9869 B39212B9869P810

Date: Version: January 15, 2013 2.0

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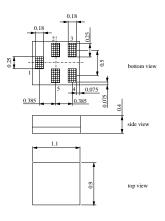
SAW Components		B9869
SAW Rx Filter		2140.0MHz
Data sheet	SMD	
Application		
Low-loss RF filter for mobile telephone WCDMA Band I systems (diversity) r	receive path	

- (RX)
- Low amplitude ripple
- Usable passband 60 MHz
- Impedance transform from 50 Ω to 100Ω
- Unbalanced to balanced operation



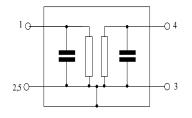
Features

- Package size 1.1 x 0.9 x 0.4 mm³
- RoHS compatible
- Approx. weight 0.003g
- Package for Surface Mount Technology (SMT)
- Ni, gold-plated terminals
- Electrostatic Sensitive Device (ESD)
- Moisture Sensitive Level 3



Pin configuration

- 1 Input, unbalanced
- 3,4 Output, balanced
- 2,5 Case-ground



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

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SAW Components					B986
SAW Rx Filter					2140.0MH
Data sheet	SMD	I			
Characteristics					
Temperature range for specification: Terminating source impedance: Terminating load impedance:	$Z_{\rm S}$ =			ed)	
		min.	typ. @ 25°C	max.	
Center frequency	f _C		2140.0	_	MHz
Maximum insertion attenuation 2110.0 2170.0	α_{max}	_	1.4	2.1	dB
Amplitude ripple (p-p) 2110.0 2170.0	$\Delta \alpha$ MHz	-	0.5	1.2	dB
Input VSWR 2110.0 2170.0	MHz	_	1.8	2.1	
Output VSWR 2110.0 2170.0	MHz	_	1.8	2.1	
CMRR (S ₂₁ -S ₃₁ / S ₂₁ +S ₃₁) 2110.0 2170.0	MHz	20 ¹⁾	26	_	dB
Attenuation					
810.0 849.0 849.0 898.0 898.0 925.0 925.0 1620.0 1620.0 1710.0 1710.0 1755.0 1755.0 1920.0 1920.0 1980.0 1980.0 2050.0 2404.0 3000.0	MHz MHz MHz MHz MHz MHz	50 40 50 40 40 40 46 40 50 25 30 32	60 60 61 52 53 53 54 58 40 42 42		dB dB dB dB dB dB dB dB dB dB dB
3000.0 4600.0 4600.0 6000.0	MHz	34 34	51 56		dB dB

 A CMRR of 19.6dB corresponds to a phase balance of 10° together with an amplitude balance of 1.0dB



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Maximum ratings

Operable temperature range	Т	-40/+85	°C	
Storage temperature range	T _{stg}	-40/+85	°C	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}	50 ¹⁾	V	machine model, 10 pulse
Input Power at 1920.01980.0MHz Tx band	P _{IN}	17	dBm	CW

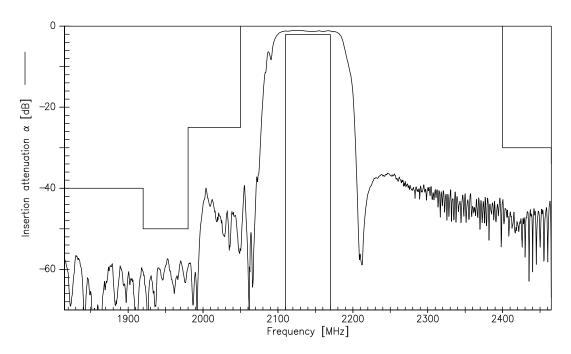
 $^{1)}\,$ acc. to JESD22-A115A (machine model), 10 negative & 10 positive pulse.

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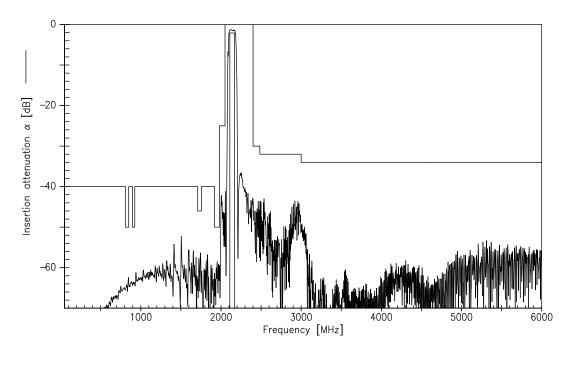




Transfer function (narrow band)



Transfer function (wide band)



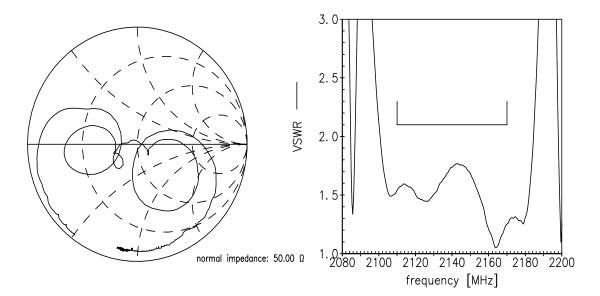
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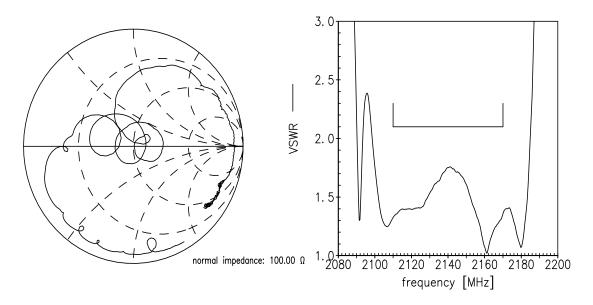
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S₁₁ function



S₂₂ function



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B9869 2140.0MHz

SAW Rx Filter Data sheet

SMD

References

Туре	B9869
Ordering code	B39212B9869P810
Marking and package	C61157-A8-A56
Packaging	F61074-V8255-Z000
Date codes	L_1126
S-parameters	B9869_NB.s3p, B9869_WB.s3p See file header for port/pin assignment table.
Soldering profile	S_6001
RoHS compatible	RoHS-compatible means that products are compatible with the requirements according to Art. 4 (substance restrictions) of Di- rective 2011/65/EU of the European Parliament and of the Council of June 8 th , 2011, on the restriction of the use of certain hazardous substances in electrical and electronic equipment ("Directive") with due regard to the application of exemptions as per Annex III of the Directive in certain cases.
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