



SAW filters for mobile communications

Series/Type: B9468

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39192B9468P810	B39192B9483P810	2015-11-20	2016-03-01	2016-06-30

For further information please contact your nearest EPCOS sales office, which will also support you in selecting a suitable substitute. The addresses of our worldwide sales network are presented at www.epcos.com/sales.

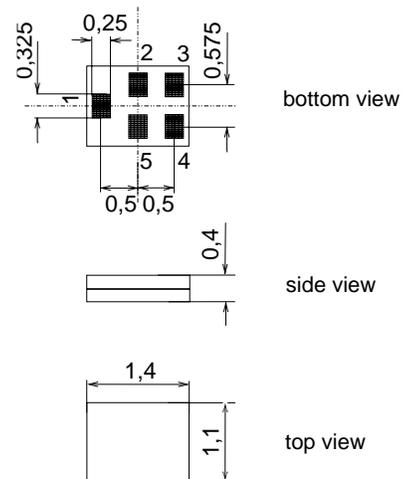
Data sheet


Application

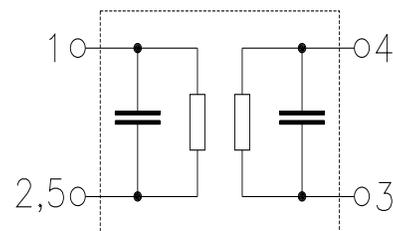
- Low-loss RF filter for mobile telephone TD-SCDMA systems.
- Unbalanced to balanced operation
- Low amplitude ripple
- Usable passband 40MHz
- Impedance 50 Ω at input and 200 Ω balanced output
- No matching network


Features

- Package size 1.4 x 1.1 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 To be grounded



Data sheet


Characteristics

Temperature range for specification: $T = -30\text{ °C to }+80\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 200\ \Omega$

		min.	typ. @ 25 °C	max.	
Center frequency	f_C	—	1900.0	—	MHz
Maximum insertion attenuation	α_{\max}	—	1.5	2.0	dB
1880.0 ... 1920.0MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0.5	1.1	dB
1880.0 ... 1920.0MHz					
Input VSWR		—	1.7	2.0	
1880.0 ... 1920.0MHz					
Output VSWR		—	1.7	2.1	
1880.0 ... 1920.0MHz					
Group delay ripple (p-p)		—	11	20	ns
1880.0 ... 1920.0MHz					
Common mode rejection ratio		23	29	—	dB
1880.0 ... 1920.0MHz					
Attenuation	α				
0.0 ... 925.0MHz		28	67	—	dB
925.0 ... 960.0MHz		35	67	—	dB
960.0 ... 1805.0MHz		28	37	—	dB
1805.0 ... 1840.0MHz		30	35	—	dB
1840.0 ... 1850.0MHz		25	40	—	dB
1980.0 ... 2005.0MHz		15	28	—	dB
2005.0 ... 6000.0MHz		28	33	—	dB

SAW Components	B9468
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SAW Tx Filter	1900.0 MHz
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Data sheet



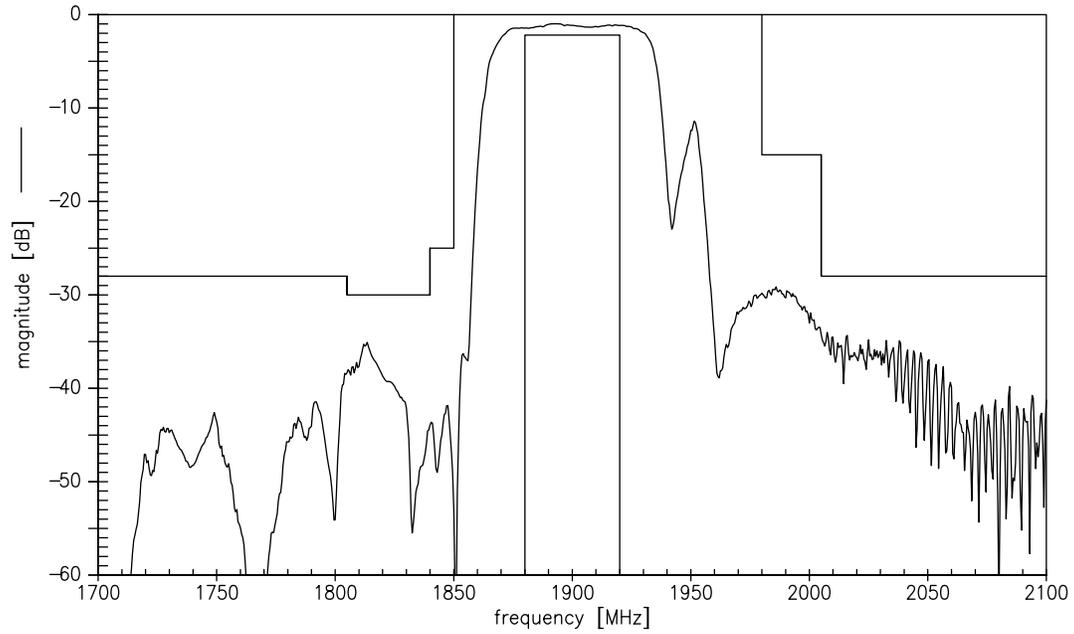
Maximum ratings

Operable temperature range	T	-40/+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 at 1880.0 ... 1920.0 MHz	P _{IN}	12	dBm	continuous wave

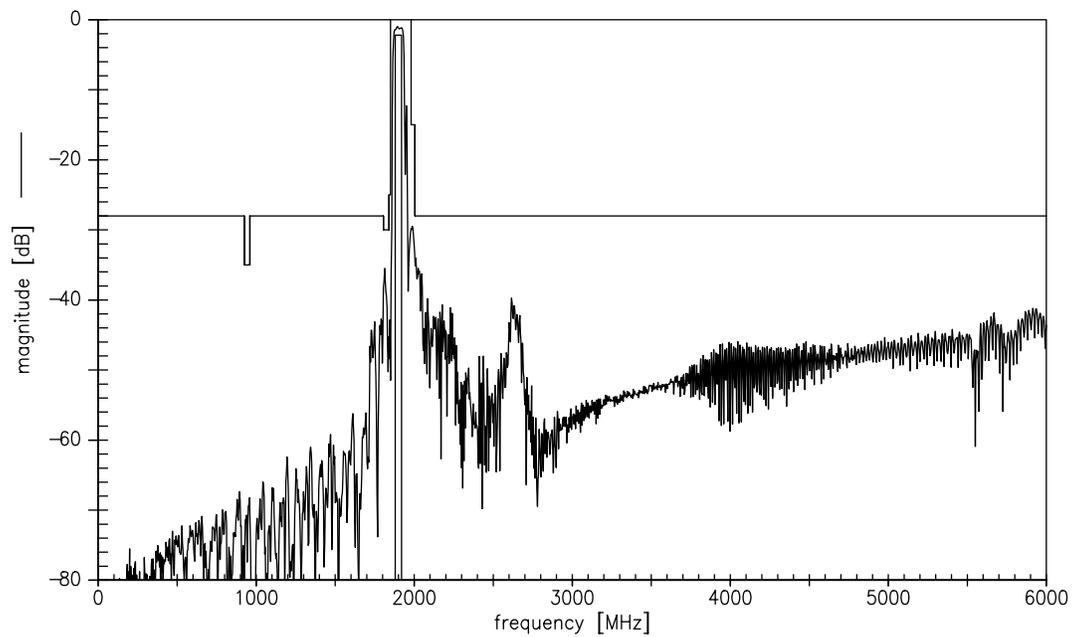
¹⁾ acc. to JESD22-A115A (machine model), 1 negative & 1 positive pulse.



Transfer function



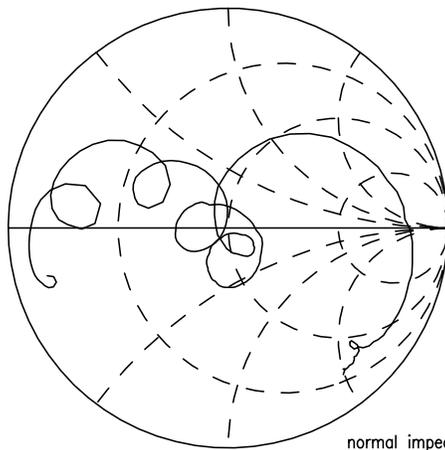
Transfer function (wideband)



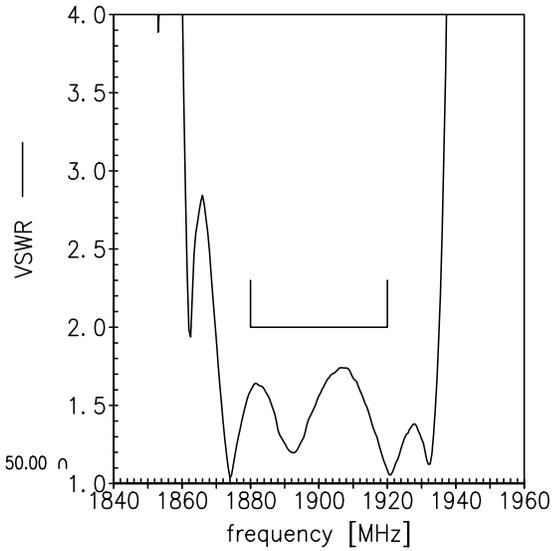


Smith charts

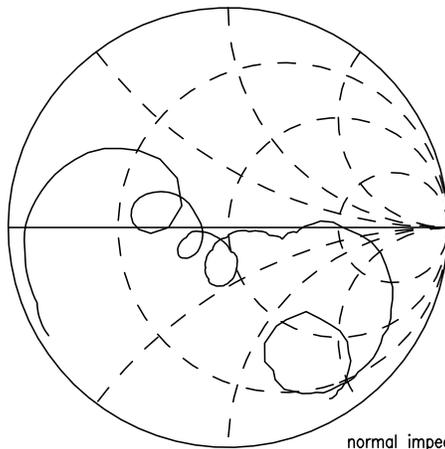
S₁₁ function



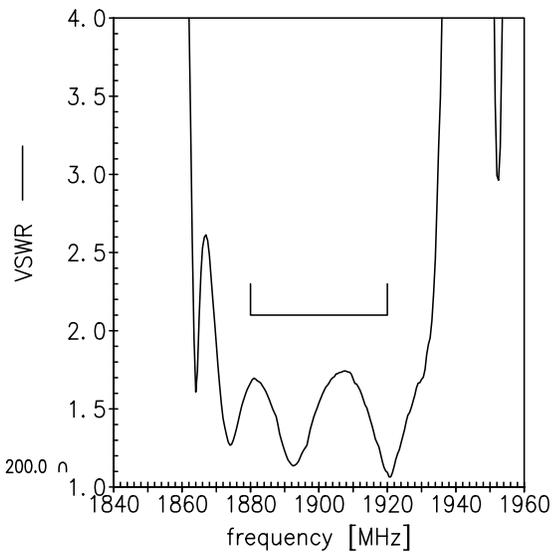
normal impedance: 50.00 Ω



S₂₂ function



normal impedance: 200.0 Ω



SAW Components	B9468
SAW Tx Filter	1900.0 MHz
Data sheet	

References

Type	B9468
Ordering code	B39192B9468P810
Marking and package	C61157-A8-A14
Packaging	F61074-V8237-Z000
Date codes	L_1126
S-parameters	B9468_NB.s3p, B9468_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."
Moldability	Before using in overmolding environment, please contact your EPCOS sales office.
Matching coils	See http://www.tdk.co.jp/tefe02/coil.htm#aname1 http://www.tdk.co.jp/etvcl/index.htm for a large variety of matching coils.

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

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