



SAW filters for mobile communications

Series/Type: B9406

The following products presented in this data sheet are being withdrawn.

Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39182B9406K610	B39182B9448P810	2012-07-13	2013-06-27	2013-07-31

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SAW Components
B9406
Low-Loss Filter for Mobile Communication
1842.50 MHz
Data Sheet

Characteristics

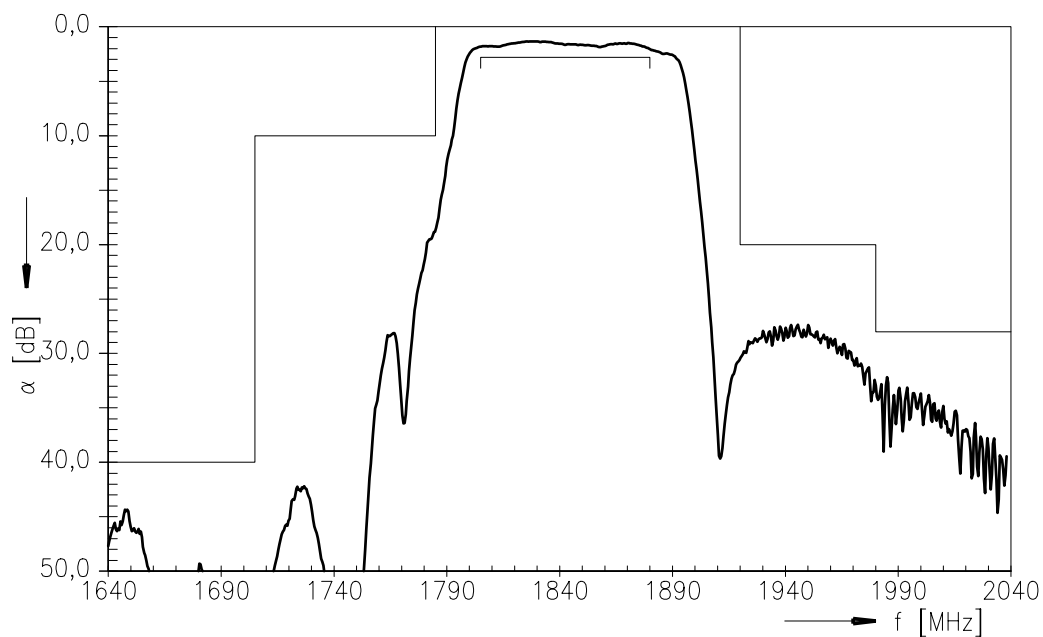
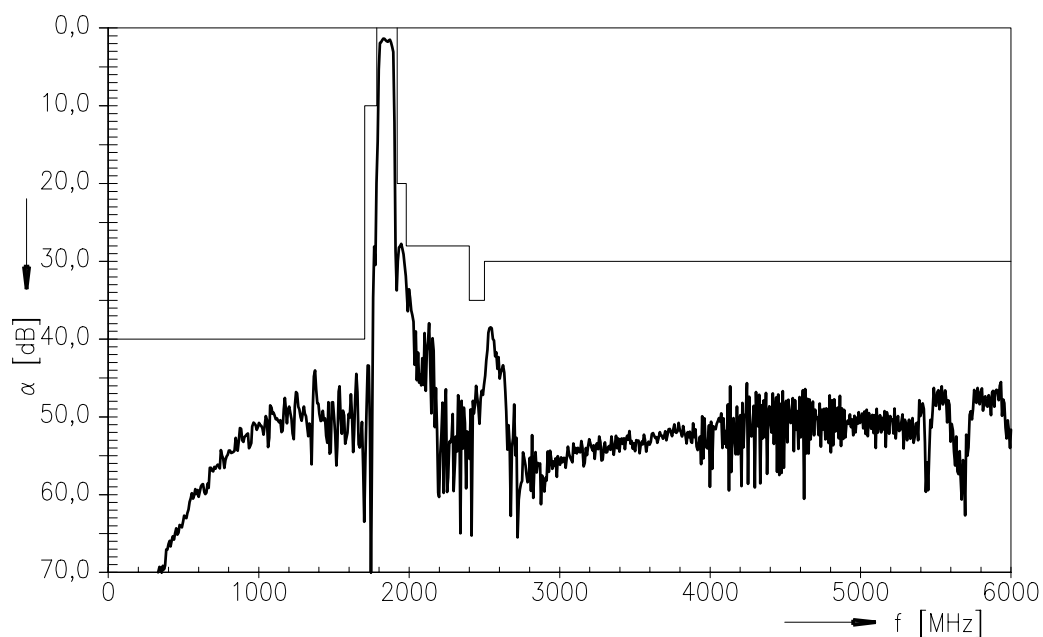
Operating temperature range: $T = -10$ to $+85$ °C
 Terminating source impedance: $Z_S = 50\Omega$
 Terminating load impedance: $Z_L = 100\Omega \parallel 12$ nH (balanced)

				B9406			
				min.	typ. @ 25°C	max.	
Center frequency	f_C			—	1842.5	—	MHz
Maximum insertion attenuation	α_{\max}			—	2.1	2.8	dB
1805.0 ... 1880.0 MHz				—	2.1	2.8	dB
Amplitude ripple (p-p)	$\Delta\alpha$			—	0.8	1.5	dB
1805.0 ... 1880.0 MHz				—	0.8	1.5	dB
Input VSWR				—	1.9	2.3	
1805.0 ... 1880.0 MHz				—	1.9	2.3	
Output VSWR				—	1.9	2.3	
1805.0 ... 1880.0 MHz				—	1.9	2.3	
Output amplitude balance (S_{31}/S_{21})				—1.2	-0.4/0.8	1.2	dB
1805.0 ... 1880.0 MHz				—1.2	-0.4/0.8	1.2	dB
Output phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^\circ$)				-10	-2/+7	10	°
1805.0 ... 1880.0 MHz				-10	-2/+7	10	°
Common mode suppression	S_{cs21}			20	42	—	dB
824.0 ... 995.0 MHz				20	42	—	dB
1648.0 ... 1990.0 MHz				20	25	—	dB
1805.0 ... 1880.0 MHz				20	25	—	dB
3296.0 ... 3980.0 MHz				20	28	—	dB
Attenuation	α			40	43	—	dB
0.0 ... 1705.0 MHz				40	43	—	dB
1705.0 ... 1785.0 MHz				10	19	—	dB
1920.0 ... 1980.0 MHz				20	27	—	dB
1980.0 ... 2400.0 MHz				28	31	—	dB
2400.0 ... 2500.0 MHz				35	42	—	dB
2500.0 ... 4000.0 MHz				30	38	—	dB
4000.0 ... 6000.0 MHz				30	48	—	dB
6000.0 ... 12700.0 MHz				—	—	—	dB

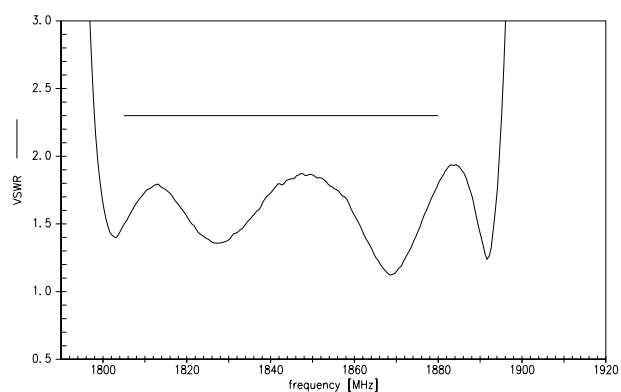
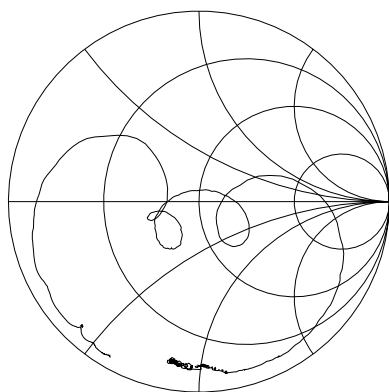
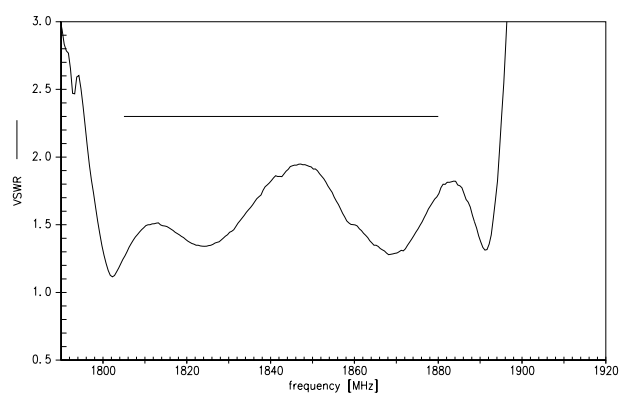
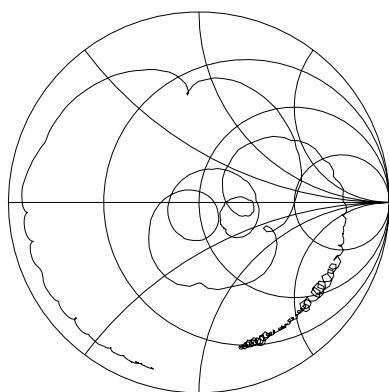

Maximum ratings

Operable temperature range	T	−30/+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 pulses
Input Power at				
GSM850, GSM900	P _{IN}	15	dBm	effective power in the on-state, duty cycle 4:8
GSM1800, GSM1900	P _{IN}	15	dBm	
Tx bands				

¹⁾ acc. to JESD22-A115A (machine model), 10 negative & 10 positive pulses.

Transfer function

Transfer function


Data Sheet

Smith chart / VSWR
 S_{11} function

 S_{22} function


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Type	B9406	
Ordering code	B39182-B9406-K610	
Marking and Package	C61157-A8-A1	
Packaging	F61074-V8212-Z000	
Date Codes	L_1126	
S-Parameters	B9406_NB.s3p B9406_WB.s3p	
Soldering profile	S_6001	

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

Published by EPCOS AG
Surface Acoustic Wave Components Division
P.O. Box 80 17 09, 81617 Munich, GERMANY

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This brochure replaces the previous edition.

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