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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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SAW filters for mobile communications

Series/Type: **B7845**

The following products presented in this data sheet are being withdrawn.

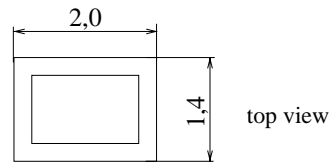
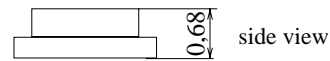
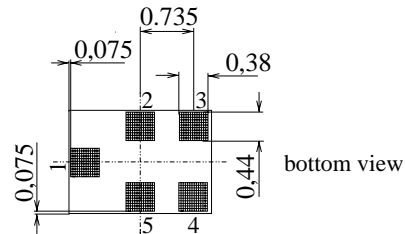
Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39881B7845K410	B39881B9400K610	2009-04-30	2009-10-31	2010-01-31

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

Features

- Low-loss RF filter for mobile telephone GSM850 systems, receive path
- Very low insertion attenuation
- Low amplitude ripple
- Usable passband 25 MHz
- Unbalanced to balanced operation
- Impedance transformation from 50 Ω to 150 Ω
- Suitable for GPRS Class 1 to 12
- Ceramic Package for **Surface Mounted Technology (SMT)**

Chip sized SAW package QCS5E


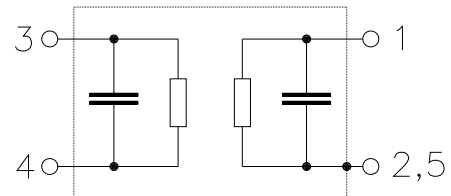
Dimensions in mm, approx. weight 0,007 g

Terminals

- Ni, gold-plated

Pin configuration

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



Type	Ordering code	Marking and Package according to	Packing according to
B7845	B39881-B7845-K410	C61157-A7-A131	F61074-V8151-Z000

Electrostatic Sensitive Device (ESD)
Maximum ratings

Operable temperature range	T	- 40 / + 85	°C	machine model, 10 pulses peak power of GSM signal, duty cycle 4:8
Storage temperature range	T_{stg}	- 40 / + 85	°C	
DC voltage	V_{DC}	5	V	
ESD voltage	V_{ESD}^*	100*	V	
Input power at GSM850, GSM900, GSM1800 and GSM1900 Tx bands	P_{IN}	15	dBm	

* acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses

Data Sheet

Characteristics

Operating temperature range: $T = 25\text{ °C}$
 Terminating source impedance: $Z_S = 50\ \Omega$
 Terminating load impedance: $Z_L = 150\ \Omega \parallel 82\text{ nH (balanced)}$

		min.	typ.	max.	
Center frequency	f_C	—	881,5	—	MHz
Maximum insertion attenuation	α_{\max}	—	1,2	1,5	dB
869,0 ... 894,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,4	0,6	dB
869,0 ... 894,0 MHz					
Input VSWR		—	1,5	1,8	
869,0 ... 894,0 MHz					
Output VSWR		—	1,5	1,8	
869,0 ... 894,0 MHz					
Attenuation					
0,0 ... 434,0 MHz		45	54	—	dB
434,0 ... 447,0 MHz		45	52	—	dB
447,0 ... 849,0 MHz		30	35	—	dB
914,0 ... 1000,0 MHz		26	29	—	dB
1000,0 ... 1738,0 MHz		28	38	—	dB
1738,0 ... 6000,0 MHz		40	46	—	dB
Amplitude balance (S_{31}/S_{21})					
869,0 ... 894,0 MHz		-1,0	-0,5 ... 0,0	1,0	dB
Phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^\circ$)					
869,0 ... 894,0 MHz		-5	-3,0 ... 1,5	5	degree
Common mode suppression	S_{sc12}				
869,0 ... 894,0 MHz		20	26	—	dB
824,0 ... 995,0 MHz		20	26	—	dB
1648,0 ... 1990,0 MHz		22	40	—	dB
3296,0 ... 3980,0 MHz		20	35	—	dB

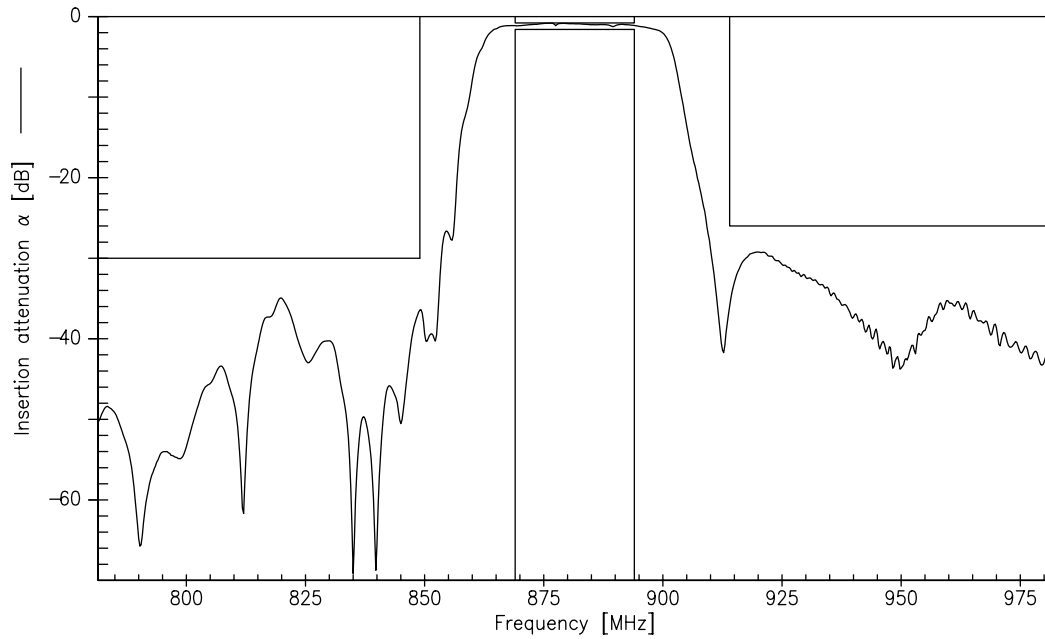

Characteristics

Operating temperature range: $T = -20$ to $+75$ °C
 Terminating source impedance: $Z_S = 50$ Ω
 Terminating load impedance: $Z_L = 150$ Ω || 82 nH (balanced)

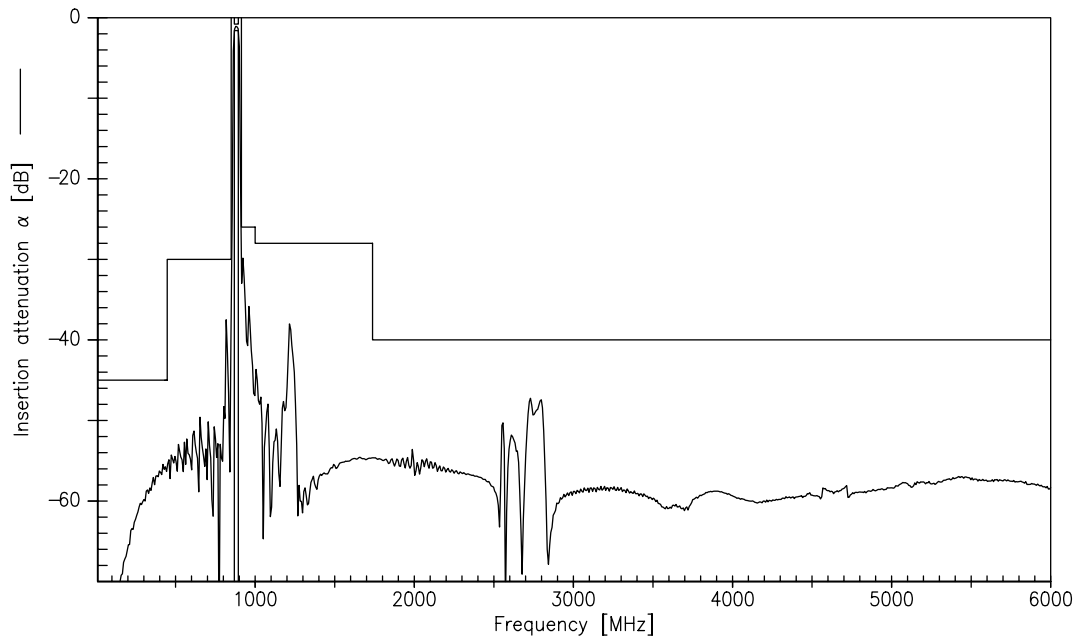
		min.	typ.	max.	
Center frequency	f_C	—	881,5	—	MHz
Maximum insertion attenuation	α_{\max}	—	1,3	1,6	dB
869,0 ... 894,0 MHz					
Amplitude ripple (p-p)	$\Delta\alpha$	—	0,6	0,8	dB
869,0 ... 894,0 MHz					
Input VSWR		—	1,6	1,8	
869,0 ... 894,0 MHz					
Output VSWR		—	1,6	1,8	
869,0 ... 894,0 MHz					
Attenuation					
0,0 ... 434,0 MHz		45	54	—	dB
434,0 ... 447,0 MHz		45	52	—	dB
447,0 ... 849,0 MHz		30	35	—	dB
914,0 ... 1000,0 MHz		26	29	—	dB
1000,0 ... 1738,0 MHz		28	38	—	dB
1738,0 ... 6000,0 MHz		40	46	—	dB
Amplitude balance ($ S_{31}/S_{21} $)					
869,0 ... 894,0 MHz		-1,0	-0,6 ... 0,0	1,0	dB
Phase balance ($\phi(S_{31}) - \phi(S_{21}) + 180^\circ$)					
869,0 ... 894,0 MHz		-5	-3,0 ... 1,5	5	degree
Common mode suppression	S_{sc12}				
869,0 ... 894,0 MHz		20	26	—	dB
824,0 ... 995,0 MHz		20	26	—	dB
1648,0 ... 1990,0 MHz		22	40	—	dB
3296,0 ... 3980,0 MHz		20	35	—	dB



Transfer function (narrow band)



Transfer function (wideband)



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This brochure replaces the previous edition.

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