



SAW Components

Data Sheet B7842





SAW Components

B7842

Low-Loss Filter for Mobile Communication

881,5 MHz

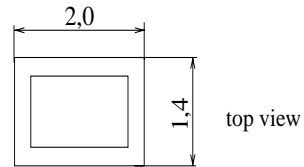
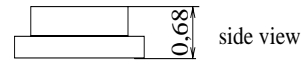
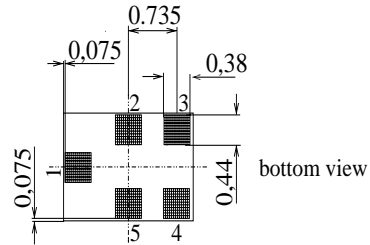
Data Sheet



Features

- Low-loss RF filter for mobile telephone GSM850 systems, receive path
- Usable passband 25 MHz
- Unbalanced operation
- Impedance 50 Ω input and output
- Suitable for GPRS Class 1 to 12
- Ceramic Package for **Surface Mounted Technology (SMT)**

Chip sized SAW package QCS5C



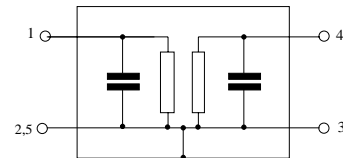
Dimensions in mm, approx. weight 0,007 g

Terminals

- Ni, gold-plated

Pin configuration

- 1 Input, unbalanced
- 4 Output, unbalanced
- 2, 3, 5 Case ground
- 2, 3, 5 to be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B7842	B39881-B7842-C710	C61157-A7-A111	F61074-V8151-Z0000

Electrostatic Sensitive Device (ESD)

Maximum ratings

Operable temperature range	T	- 30 / + 85	°C	
Storage temperature range	T_{stg}	- 40 / + 85	°C	
DC voltage	V_{DC}	5	V	
Input power max.	P_{IN}	15	dBm	



SAW Components

B7842

Low-Loss Filter for Mobile Communication

881,5 MHz

Data Sheet



Characteristics

Operating temperature: $T = 25 \pm 2 \text{ }^\circ\text{C}$
 Terminating source impedance: $Z_S = 50 \text{ } \Omega$
 Terminating load impedance: $Z_L = 50 \text{ } \Omega$

			min.	typ.	max.	
Center frequency	f_c		—	881,5	—	MHz
Maximum insertion attenuation	α_{\max}	869,0 ... 894,0 MHz	—	1,6	2,0	dB
Amplitude ripple (p-p)	$\Delta\alpha$	869,0 ... 894,0 MHz	—	0,6	1,0	dB
Input VSWR		869,0 ... 894,0 MHz	—	1,7	2,0	
Output VSWR		869,0 ... 894,0 MHz	—	1,7	2,0	
Attenuation	α					
		0,0 ... 450,0 MHz	38,0	44,0	—	dB
		450,0 ... 800,0 MHz	30,0	35,0	—	dB
		800,0 ... 849,0 MHz	24,0	26,0	—	dB
		914,0 ... 960,0 MHz	24,0	26,0	—	dB
		960,0 ... 6000,0 MHz	26,0	33,0	—	dB



SAW Components

B7842

Low-Loss Filter for Mobile Communication

881,5 MHz

Data Sheet



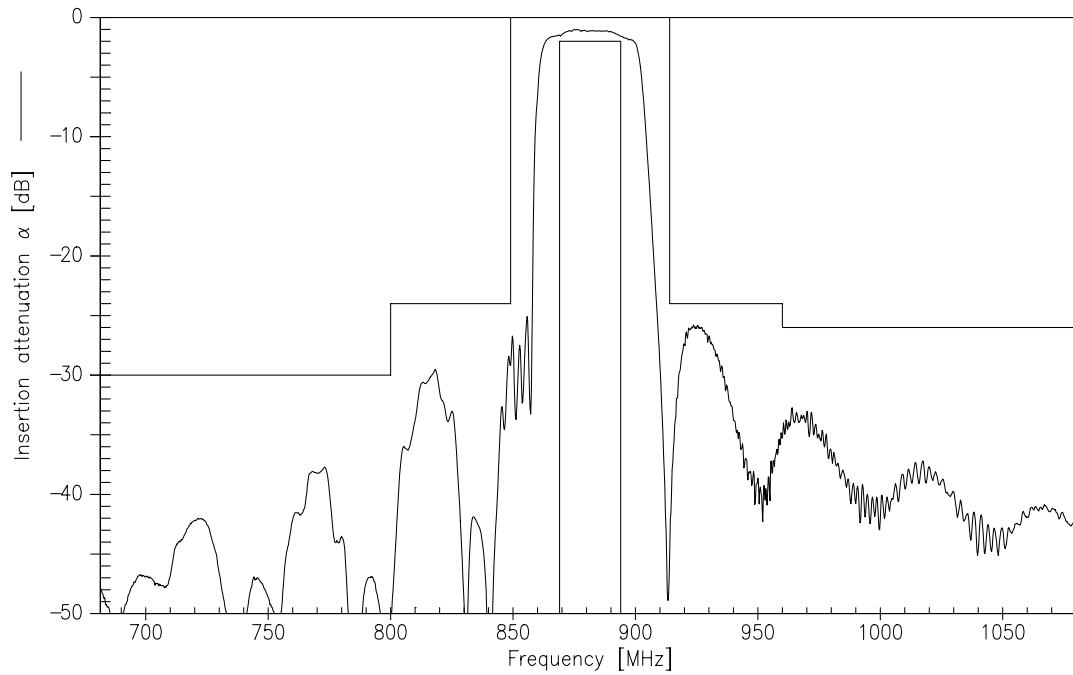
Characteristics

Operating temperature: $T = -30 \dots +85 \text{ }^\circ\text{C}$
 Terminating source impedance: $Z_S = 50 \text{ } \Omega$
 Terminating load impedance: $Z_L = 50 \text{ } \Omega$

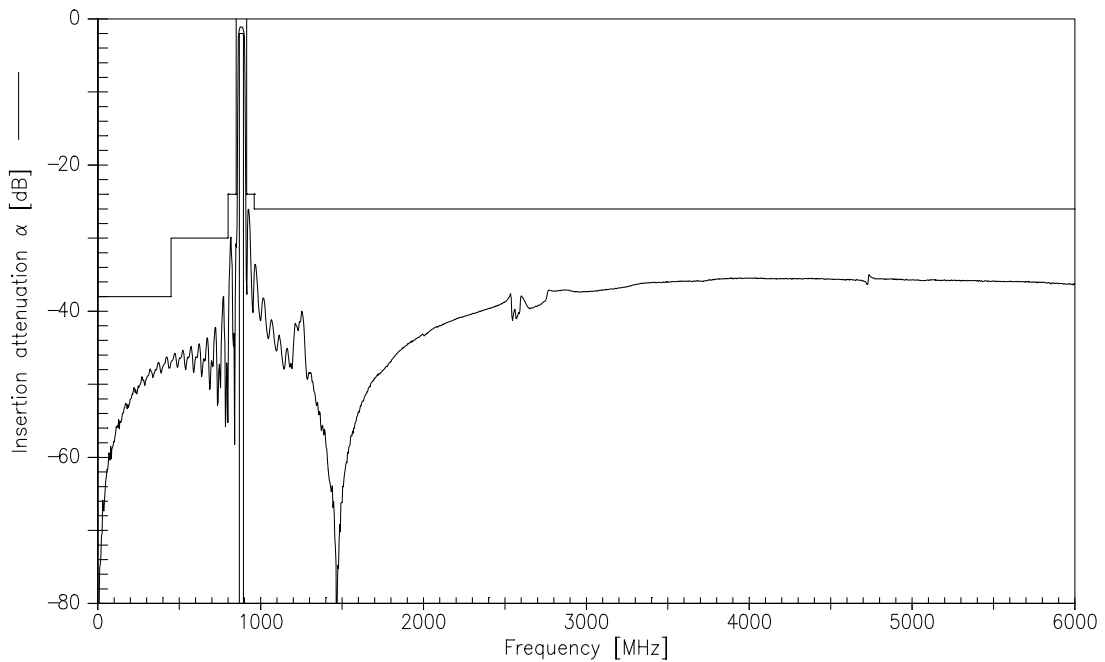
			min.	typ.	max.	
Center frequency	f_c		—	881,5	—	MHz
Maximum insertion attenuation	α_{\max}					
		869,0 ... 894,0 MHz	—	1,6	2,2	dB
Amplitude ripple (p-p)	$\Delta\alpha$					
		869,0 ... 894,0 MHz	—	0,6	1,3	dB
Input VSWR		869,0 ... 894,0 MHz	—	1,7	2,1	
Output VSWR		869,0 ... 894,0 MHz	—	1,7	2,1	
Attenuation	α					
		0,0 ... 450,0 MHz	38,0	44,0	—	dB
		450,0 ... 800,0 MHz	30,0	35,0	—	dB
		800,0 ... 849,0 MHz	24,0	26,0	—	dB
		914,0 ... 960,0 MHz	24,0	26,0	—	dB
		960,0 ... 6000,0 MHz	26,0	33,0	—	dB



Transfer function (Narrowband measurement)



Transfer function (Wideband measurement)





SAW Components

B7842

Low-Loss Filter for Mobile Communication

881,5 MHz

Data Sheet



Published by EPCOS AG

Surface Acoustic Wave Components Division, SAW MC WT

P.O. Box 80 17 09, 81617 Munich, GERMANY

© EPCOS AG 2003. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.