SAW Filters for Mobile Communications

Series/Type: **B9012**

The following products presented in this data sheet are being withdrawn.

| Ordering Code	Substitute Product	Date of Withdrawal	Deadline Last Orders	Last Shipments
B39901B9012K210	B39901B9431M410	2009-12-18	2010-06-30	2010-09-30

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.

TDK

Features

- Low-loss RF filter for mobile telephone EGSM system, transmit path
- Low amplitude ripple
- Usable passband 35 MHz
- Unbalanced to balanced operation
- Impedance transformation from 100 Ω to 50 Ω
- Suitable for GPRS class 1 to 12
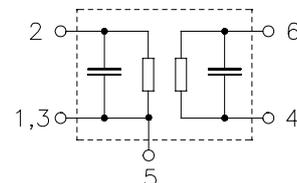- Ceramic package for **S**urface **M**ounted **T**echnology (**SMT**)
- Pb-free

Terminals

- Ni, gold-plated

Chip sized SAW package **DCS6S**
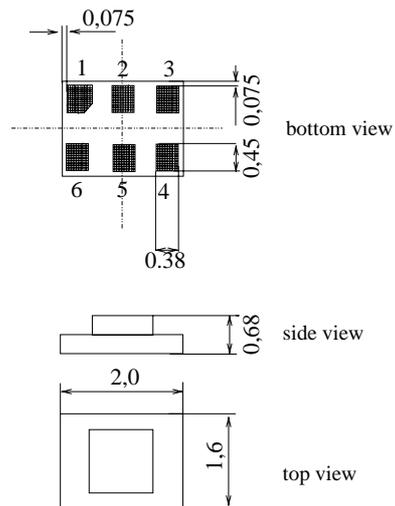
Dimensions in mm, approx. weight 0,010 g

Pin configuration

4, 6	Balanced inputs
2	Unbalanced output
1, 3	Output ground
1, 3, 5	To be grounded

Type	Ordering code	Marking and Package according to	Packing according to
B9012	B39901-B9012-K210	C61157-A7-A115	F61074-V8152-Z000

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	
ESD voltage	V^*_{ESD}	100*	V	Machine Model, 10 pulses
Input power at GSM850, GSM900 GSM1800 and GSM1900 Tx bands	P_{IN}	13	dBm	peak power of GSM signal, duty cycle 4:8

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

SAW Components	**B9012**
Low-Loss Filter for Mobile Communication	**897,5 MHz**

Data Sheet SMD

Characteristics

Operating temperature range: T $= 25 \pm 2\ ^{\circ}C$
Terminating source impedance: Z_S $= 100\ \Omega$ (balanced) || 82 nH
Terminating load impedance: Z_L $= 50\ \Omega$

			min.	**typ.**	**max.**	
Center frequency		f_C	—	897,5	—	MHz
Maximum insertion attenuation		α_{max}				
	880,0 ... 915,0 MHz		—	2,4	2,9	dB
Amplitude ripple (p-p)		$\Delta\alpha$				
	880,0 ... 915,0 MHz		—	0,8	1,5	dB
Input VSWR						
	880,0 ... 915,0 MHz		—	1,8	2,0	
Output VSWR						
	880,0 ... 915,0 MHz		—	1,8	2,0	
Output phase balance $(\phi(S_{31})-\phi(S_{21})+180^{\circ})$						
	880,0 ... 915,0 MHz		-10	—	10	degree
Output amplitude balance $(|S_{31}/S_{21}|)$						
	880,0 ... 915,0 MHz		-1,0	—	1,0	dB
Diff. to common mode suppression		S_{sc12}				
	880,0 ... 915,0 MHz		18	26	—	dB
	1760,0 ... 1830,0 MHz		18	41	—	dB
	2640,0 ... 2745,0 MHz		18	32	—	dB
Attenuation		α				
	0,0 ... 800,0 MHz		45	56	—	dB
	800,0 ... 860,0 MHz		25	42	—	dB
	860,0 ... 870,0 MHz		13	26	—	dB
	925,0 ... 935,0 MHz		9	15	—	dB
	935,0 ...1805,0 MHz		25	31	—	dB
	1805,0 ...3660,0 MHz		30	36	—	dB
	3660,0 ...6000,0 MHz		15	30	—	dB

Characteristics

Operating temperature range:	T = -10 ... +80 °C
Terminating source impedance:	Z_S = 100 Ω (balanced) ∥ 82 nH
Terminating load impedance:	Z_L = 50 Ω

			min.	typ.	max.	
Center frequency		f_C	—	897,5	—	MHz
Maximum insertion attenuation		α_{max}				
	880,0 ... 915,0 MHz		—	2,6	3,0	dB
Amplitude ripple (p-p)		$\Delta\alpha$				
	880,0 ... 915,0 MHz		—	1,0	1,5	dB
Input VSWR						
	880,0 ... 915,0 MHz		—	1,8	2,0	
Output VSWR						
	880,0 ... 915,0 MHz		—	1,8	2,0	
Output phase balance ($\phi(S_{31})-\phi(S_{21})+180°$)						
	880,0 ... 915,0 MHz		-10	—	10	degree
Output amplitude balance ($\lvert S_{31}/S_{21}\rvert$)						
	880,0 ... 915,0 MHz		-1,0	—	1,0	dB
Diff. to common mode suppression		S_{sc12}				
	880,0 ... 915,0 MHz		18	26	—	dB
	1760,0 ... 1830,0 MHz		18	41	—	dB
	2640,0 ... 2745,0 MHz		18	32	—	dB
Attenuation		α				
	0,0 ... 800,0 MHz		45	56	—	dB
	800,0 ... 860,0 MHz		25	42	—	dB
	860,0 ... 870,0 MHz		12	26	—	dB
	925,0 ... 935,0 MHz		8	15	—	dB
	935,0 ...1805,0 MHz		25	31	—	dB
	1805,0 ...3660,0 MHz		30	36	—	dB
	3660,0 ...6000,0 MHz		15	30	—	dB

Characteristics

Operating temperature range: T = -30 ... +85 ˚C
Terminating source impedance: Z_S = 100 Ω (balanced) || 82 nH
Terminating load impedance: Z_L = 50 Ω

				min.	typ.	max.	
Center frequency			f_C	—	897,5	—	MHz
Maximum insertion attenuation			α_{max}				
	880,0	... 915,0	MHz	—	2,7	3,7	dB
Amplitude ripple (p-p)			$\Delta\alpha$				
	880,0	... 915,0	MHz	—	1,2	2,2	dB
Input VSWR							
	880,0	... 915,0	MHz	—	1,8	2,0	
Output VSWR							
	880,0	... 915,0	MHz	—	1,8	2,0	
Output phase balance ($\phi(S_{31})-\phi(S_{21})+180˚$)							
	880,0	... 915,0	MHz	-10	—	10	degree
Output amplitude balance ($|S_{31}/S_{21}|$)							
	880,0	... 915,0	MHz	-1,0	—	1,0	dB
Diff. to common mode suppression			S_{sc12}				
	880,0	... 915,0	MHz	18	26	—	dB
	1760,0	... 1830,0	MHz	18	41	—	dB
	2640,0	... 2745,0	MHz	18	32	—	dB
Attenuation			α				
	0,0	... 800,0	MHz	45	56	—	dB
	800,0	... 860,0	MHz	25	42	—	dB
	860,0	... 870,0	MHz	12	26	—	dB
	925,0	... 935,0	MHz	8	13	—	dB
	935,0	...1805,0	MHz	25	30	—	dB
	1805,0	...3660,0	MHz	30	36	—	dB
	3660,0	...6000,0	MHz	15	30	—	dB

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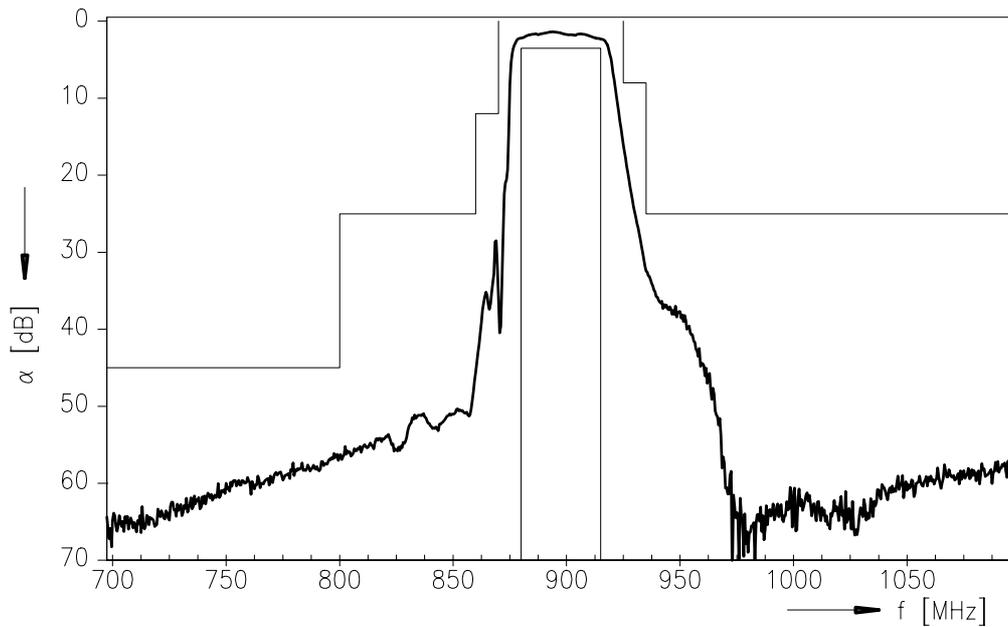
Transfer function (wideband measurement)
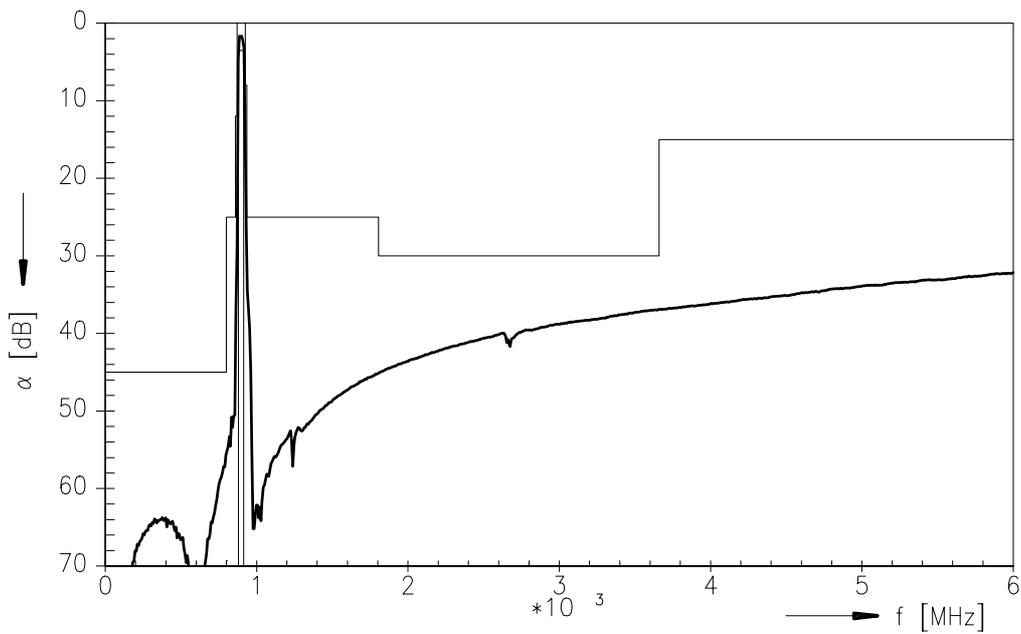
Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[EPCOS](#):
  [B39901B9012K210](#)

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.

- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.

- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.

Тел: +7 (812) 336 43 04 (многоканальный)
Email: org@lifeelectronics.ru

www.lifeelectronics.ru