

# SAW Components

Data Sheet B7737, Pb-Free





**Data Sheet** 

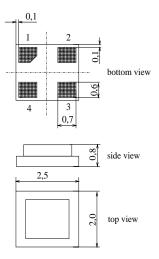
### Chip Sized SAW Package DCS4H

#### **Features**

- Low-loss RF filter for iDEN
- Low amplitude ripple
- Usable passband 26 MHz
- $\blacksquare$  No matching network required for operation at 50  $\Omega$
- Pb-Free
- Package for Surface Mounted Technology (SMT)

#### **Terminals**

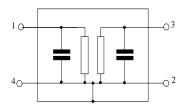
■ Ni, gold-plated



Dimensions in mm, approx. weight 0,015g

#### Pin configuration

1	Input
3	Output
2,4	Ground



Туре	Ordering code	Marking and Package according to	Packing according to		
B7737	B39921-B7737-K710	C61157-A7-A136	F61074-V8189-Z000		

Electrostatic Sensitive Device (ESD)

#### **Maximum ratings**

Operable temperature range	Τ	- 30 / + 85	°C	
Operable temperature range	,	- 30 / + 03		
Storage temperature range	$T_{\rm stg}$	<b>- 40 / + 85</b>	°C	
ESD voltage	V*ESD	100*	V	Machine Model, 10 pulses.
Source power (cw)	$P_{S}$	0	dBm	Souce and load impedance 50 $\Omega$ .

<sup>\* -</sup> acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses



**Data Sheet** 

## Characteristics

Operating temperature range:  $T = 25 \pm 2 \,^{\circ}\text{C}$ Terminating source impedance:  $Z_{\text{S}} = 50 \,\Omega$ Terminating load impedance:  $Z_{\text{L}} = 50 \,\Omega$ 

			min.	typ.	max.	
Nominal frequency		f <sub>N</sub>	_	915,0	_	MHz
Maximum insertion attenuation		$\alpha_{max}$				
902,0 928,0	MHz	Milax	_	2,0	2,5	dB
Amplitude ripple (p-p)		Δα				
902,0 928,0	MHz		_	0,6	1,0	dB
Group delay ripple (p-p)		Δτ				
902,0 928,0	MHz		_	15	50	ns
Return loss (Input and Output)						
902,0 928,0	MHz		12,0	14,0	<u> </u>	dB
Absolute attenuation		$\alpha_{\text{abs}}$				
0,1 702,0	MHz		50	64	<u> </u>	dB
738,0 764,0	MHz		49	62	_	dB
820,0 846,0	MHz		42	60	_	dB
990,01010,0	MHz		42	60	_	dB
1072,01092,0	MHz		49	54	_	dB
1128,01804,0	MHz		45	50	_	dB
1804,01856,0	MHz		40	51	_	dB
1856,03000,0	MHz		30	40	_	dB
Temperature coefficient of frequency		$TC_{f}$	_	<b>–</b> 36	_	ppm/K



**Data Sheet** 

## Characteristics

Operating temperature range:  $T = -30 \dots +70 \,^{\circ}\text{C}$ 

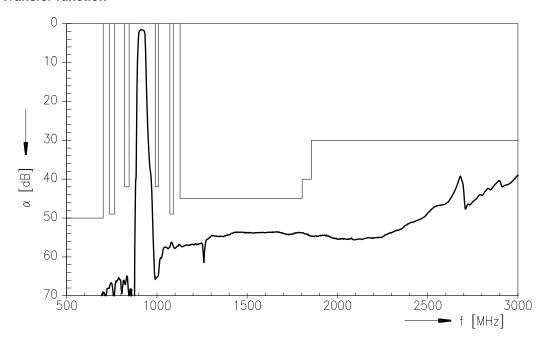
Terminating source impedance:  $Z_{\rm S} = 50~\Omega$ Terminating load impedance:  $Z_{\rm L} = 50~\Omega$ 

			min.	typ.	max.	
Nominal frequency		$f_{N}$		915,0	_	MHz
Maximum insertion attenuation		α				
902,0 928,0	MHz	$\alpha_{max}$	_	2,1	2,5	dB
Amplitude ripple (p-p)		Δα				
902,0 928,0	MHz		_	0,6	1,0	dB
Group delay ripple (p-p)		Δτ				
902,0 928,0	MHz		_	20	50	ns
Return loss (Input and Output)						
902,0 928,0	MHz		10,0	13,5	_	dB
Absolute attenuation		$\alpha_{\text{abs}}$				
0,1 702,0	MHz		50	64		dB
738,0 764,0	MHz		49	62	_	dB
820,0 846,0	MHz		42	60	_	dB
990,01010,0	MHz		42	60	_	dB
1072,01092,0	MHz		49	54	_	dB
1128,01804,0	MHz		45	50	_	dB
1804,01856,0	MHz		40	51	_	dB
1856,03000,0	MHz		30	40	_	dB
Temperature coefficient of frequency		$TC_{f}$	<del></del>	<b>–</b> 36	_	ppm/K

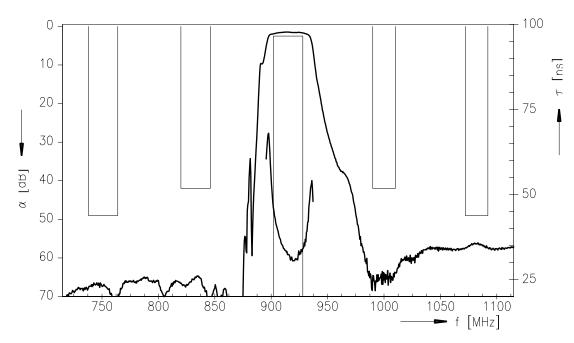


**Data Sheet** 

## **Transfer function**



# Transfer function (pass band)





**Data Sheet** 

## Published by EPCOS AG Surface Acoustic Wave Components Division, SAW MC PD P.O. Box 80 17 09, D-81617 München

© EPCOS AG 2005. All Rights Reserved. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

The information contained in this brochure describes the type of component and shall not be considered as guaranteed characteristics. 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.