

Data Sheet B7713, Pb-Free





B7713

# **Low-Loss Filter for Mobile Communication**

836,5 MHz

**Data Sheet** 



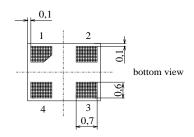
#### **Features**

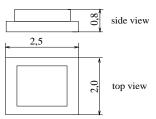
- Low-loss RF filter for mobile telephone AMPS systems, transmit path
- High Rx rejection
- Usable passband 25 MHz
- Package for Surface Mounted Technology (SMT)
- Pb-Free

#### **Terminals**

■ Gold-plated Ni

# Chip Size SAW Package DCS4H

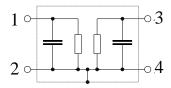




Dimensions in mm, approx. weight 0,015 g

#### Pin configuration

1 Input 3 Output 2, 4 Ground



Туре	Ordering code	Marking and Package according to	Packing according to
B7713	B39841-B7713-K710	C61157-A7-A136	F61074-V8189-Z000

Electrostatic Sensitive Device (ESD)

#### **Maximum ratings**

Operating temperature range	Τ	- 20/+ 70	°C	
Storage temperature range	$T_{stg}$	<b>- 40/+ 85</b>	°C	
DC voltage	$V_{\rm DC}$	5	V	
ESD voltage	$V^*_{ESD}$	100*	V	Machine Model, 10 pulses
Input Power max.	$P_{IN}$	15	dBm	source impedance 50 $\Omega$

 $<sup>^{\</sup>star}$  - acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses



B7713

**Low-Loss Filter for Mobile Communication** 

836,5 MHz

**Data Sheet** 

#### Characteristics

Operating temperature range:

 $T = -20 \text{ to } +70 \,^{\circ}\text{C}$   $Z_{\text{S}} = 50 \,\Omega$   $Z_{\text{L}} = 50 \,\Omega$ Terminating source impedance: Terminating load impedance:

				min.	typ.	max.	
Center frequency			f <sub>C</sub>	_	836,5	_	MHz
Maximum insertion attenuation			$\alpha_{max}$				
824,0	849,0	MHz		_	2,5	3,5	dB
Amplitude ripple (p-p)		Δα					
824,0	849,0	MHz		_	1,0	2,0	dB
Return loss							
824,0	849,0	MHz		_	12,0	10,0	dB
Attenuation			α				
0,0	800,0	MHz		40,0	50,0	_	dB
869,0	1050,0	MHz		30,0	32,0	_	dB
1050,0	2000,0	MHz		45,0	50,0	_	dB
2000,0	2600,0	MHz		35,0	40,0	_	dB
2600,0	3200,0	MHz		30,0	40,0	_	dB
3200,0	4000,0	MHz		20,0	25,0	_	dB
4000,0	6000,0	MHz		10,0	18,0	_	dB



SAW Components

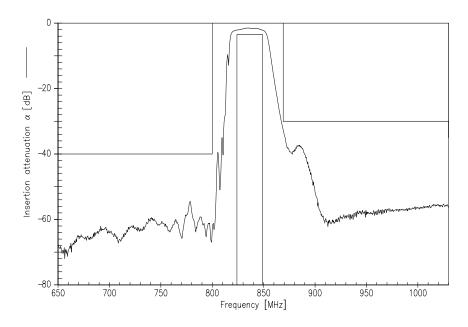
Low-Loss Filter for Mobile Communication

B7713

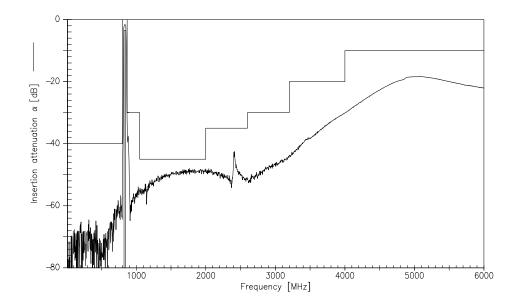
B36,5 MHz

Data Sheet

# **Transfer function**



# Transfer function (wideband)





**Low-Loss Filter for Mobile Communication** 

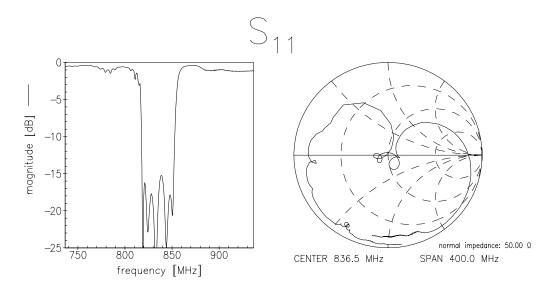
836,5 MHz

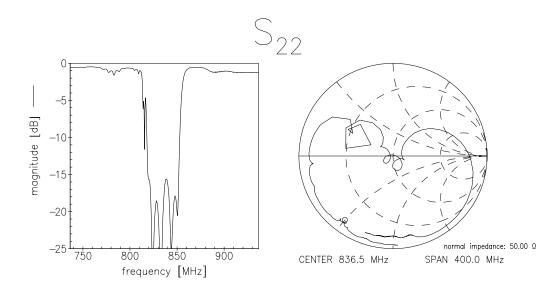
B7713

**Data Sheet** 



# **Reflection functions**







**Low-Loss Filter for Mobile Communication** 

836,5 MHz

**Data Sheet** 



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

© EPCOS AG 2005. 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.