



# SAW Components

Preliminary Data Sheet LH45A





SAW Components

LH45A

Low-Loss Filter for Mobile Communication

2017,5MHz

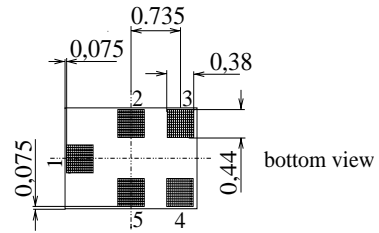
Preliminary Data Sheet



Chip Size Saw Package QCS5C

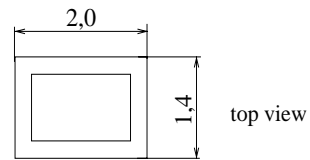
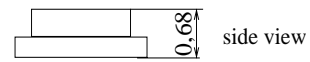
**Features**

- Low-loss RF filter for mobile telephone TD\_SCDMA system
- Low amplitude ripple
- Usable passband 15MHz
- No matching network required for operation at 50Ω
- Package for Surface Mount Technology (SMT)



**Terminals**

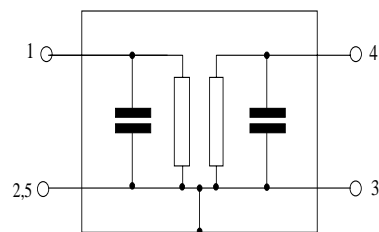
- Ni, Gold-plated



Dimensions in mm, approx. weight tbd.

**Pin configuration**

- 1 Input
- 4 Output
- 2,3,5 Ground



Type	Ordering code	Marking and Package according to	Packing according to
LH45A	tbd	C61157-A7-A111	F61074-V8151-Z000

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

Operating temperature range	$T$	- 25/+ 55	°C	
Storage temperature range	$T_{stg}$	- 40/+ 85	°C	
DC voltage	$V_{DC}$	5	V	
ESD voltage	$V_{ESD}$	50	V	



Preliminary Data Sheet



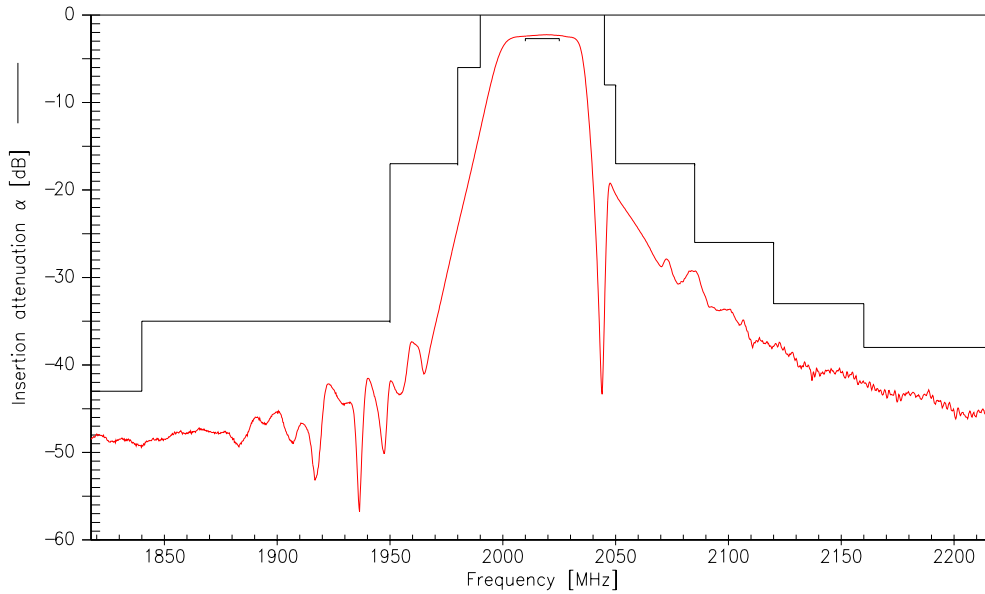
Characteristics

Operating temperature:  $T = -25$  to  $+55^{\circ}\text{C}$   
 Terminating source impedance:  $Z_S = 50\Omega$   
 Terminating load impedance:  $Z_L = 50\Omega$

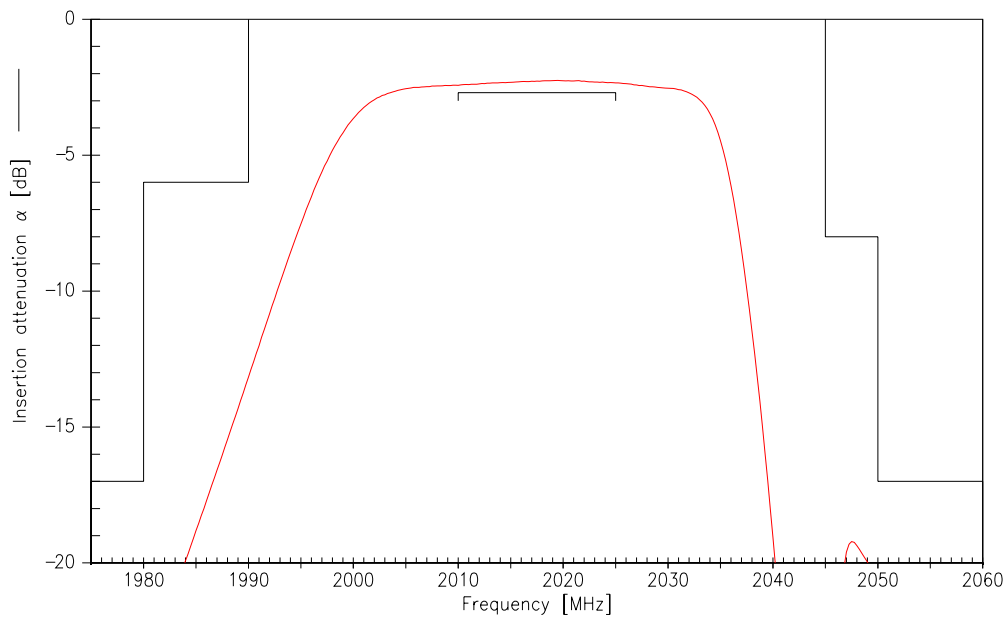
		min.	typ.	max.	
<b>Center frequency</b>	$f_c$	—	2017,5	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{max}$				
	2010,0 ... 2025,0MHz	—	2,5	2,7	dB
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$				
	2010,0 ... 2025,0MHz	—	0,25	0,4	dB
<b>Input VSWR</b>					
	2010,0 ... 2025,0MHz	—	1,8	2,1	
<b>Output VSWR</b>					
	2010,0 ... 2025,0MHz	—	1,9	2,1	
<b>Attenuation</b>	$\alpha$				
	0 ... 1840,0MHz	43	48	—	dB
	1840,0 ... 1950,0MHz	35	40	—	dB
	1950,0 ... 1980,0MHz	17	19	—	dB
	1980,0 ... 1990,0MHz	6	8	—	dB
	2045,0 ... 2050,0MHz	8	16	—	dB
	2050,0 ... 2085,0MHz	17	20	—	dB
	2085,0 ... 2120,0MHz	26	29	—	dB
	2120,0 ... 2160,0 MHz	33	36	—	dB
	2160,0 ... 2400,0MHz	38	41	—	dB
	2400,0 ... 2700,0 MHz	49	52	—	dB
	2700,0 ... 3500,0 MHz	47	50	—	dB
	3500,0 ... 4300,0MHz	42	45	—	dB
	4300,0 ... 5000,0MHz	36	40	—	dB
	5000,0 ... 5500,0MHz	33	36	—	dB
	5500,0 ... 6000,0MHz	28	30	—	dB



Transfer function (Passband):



Transfer function (Narrowband):





SAW Components

LH45A

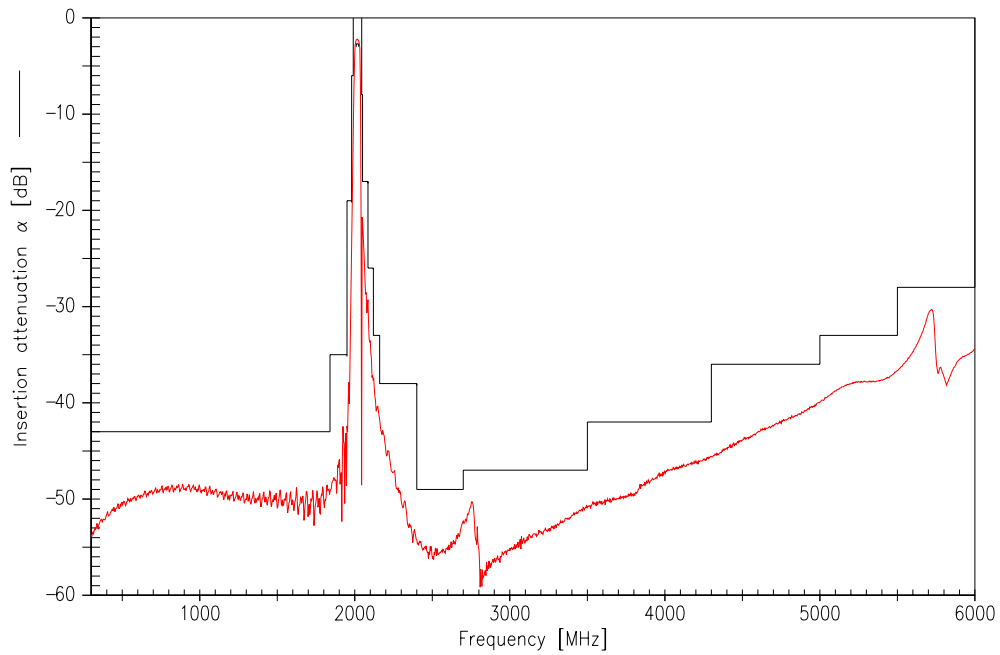
Low-Loss Filter for Mobile Communication

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Transfer function (Wideband) :





**SAW Components**

**LH45A**

**Low-Loss Filter for Mobile Communication**

**2017,5MHz**

Preliminary Data Sheet



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**Surface Acoustic Wave Components Division, SAW MC WT**

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

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# SAW Components

Preliminary Data LH46B

Data Sheet

A large, stylized, 3D-rendered graphic of the EPCOS logo. The letters "EPCOS" are rendered in a glowing, white, sans-serif font, appearing to be part of a larger, curved structure that resembles a stylized globe or a series of overlapping planes. The background is dark and textured.



**SAW Components**

**LH46B**

**Low-Loss Filter for Mobile Communication**

**2017,5 MHz**

Preliminary Data



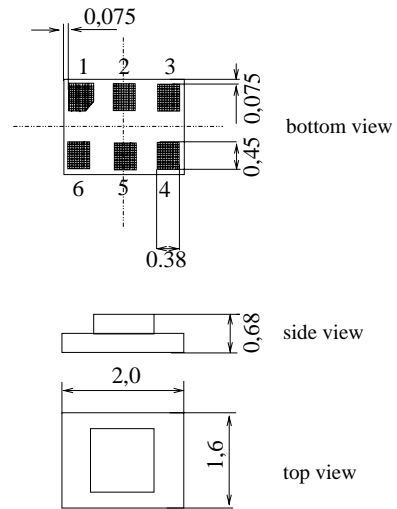
**Features**

- Low-loss RF filter for mobile telephone TD\_SCDMA system
- Low amplitude ripple
- Usable passband 15 MHz
- Unbalanced to balanced operation
- Impedance transformation from 50Ω to 200Ω
- No matching network required
- Package for **Surface Mounted Technology (SMT)**

**Terminals**

- Gold-plated Ni

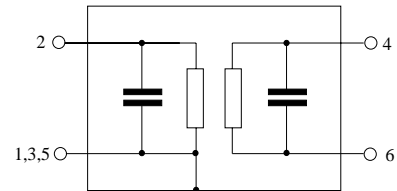
**Chip Size SAW package DCS6T**



Dimensions in mm, approx. weight 0,012 g

**Pin configuration**

- 2                    Input
- 4, 6                Balanced output
- 1, 3, 5            To be grounded



Type	Ordering code	Marking and Package according to	Packing according to
LH46B			

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

Operable temperature range	$T$	- 25 / + 55	°C
Storage temperature range	$T_{stg}$	- 40 / + 85	°C
DC voltage	$V_{DC}$	5	V
ESD voltage	$V_{ESD}$	50	V





**SAW Components**

**LH46B**

**Low-Loss Filter for Mobile Communication**

**2017,5 MHz**

**Preliminary Data**



**Characteristics**

Operating temperature range:  $T = -25$  to  $+55$  °C  
 Terminating source impedance:  $Z_S = 50$  Ω  
 Terminating load impedance:  $Z_L = 200$  Ω (balanced)

				<b>min.</b>	<b>typ.</b>	<b>max.</b>	
<b>Center frequency</b>		$f_C$		—	2017,5	—	MHz
<b>Maximum insertion attenuation</b>	2010,0 ... 2025,0	MHz	$\alpha_{max}$	—	2,5	2,8	dB
<b>Amplitude ripple (p-p)</b>	2010,0 ... 2025,0	MHz	$\Delta\alpha$	—	0,4	0,7	dB
<b>Input VSWR</b>	2010,0 ... 2025,0	MHz		—	1,9	2,1	
<b>Output VSWR</b>	2010,0 ... 2025,0	MHz		—	1,6	1,8	
<b>Attenuation</b>			$\alpha$				
	0,0 ... 1840,0	MHz		51	54	—	dB
	1840,0 ... 1970,0	MHz		22	27	—	dB
	1970,0 ... 1980,0	MHz		15	21	—	dB
	1980,0 ... 1990,0	MHz		7	11	—	dB
	2045,0 ... 2085,0	MHz		11	14	—	dB
	2085,0 ... 2120,0	MHz		22	24	—	dB
	2120,0 ... 2160,0	MHz		30	34	—	dB
	2160,0 ... 2300,0	MHz		36	40	—	dB
	2300,0 ... 3000,0	MHz		42	45	—	dB
	3000,0 ... 6000,0	MHz		56	62	—	dB



SAW Components

LH46B

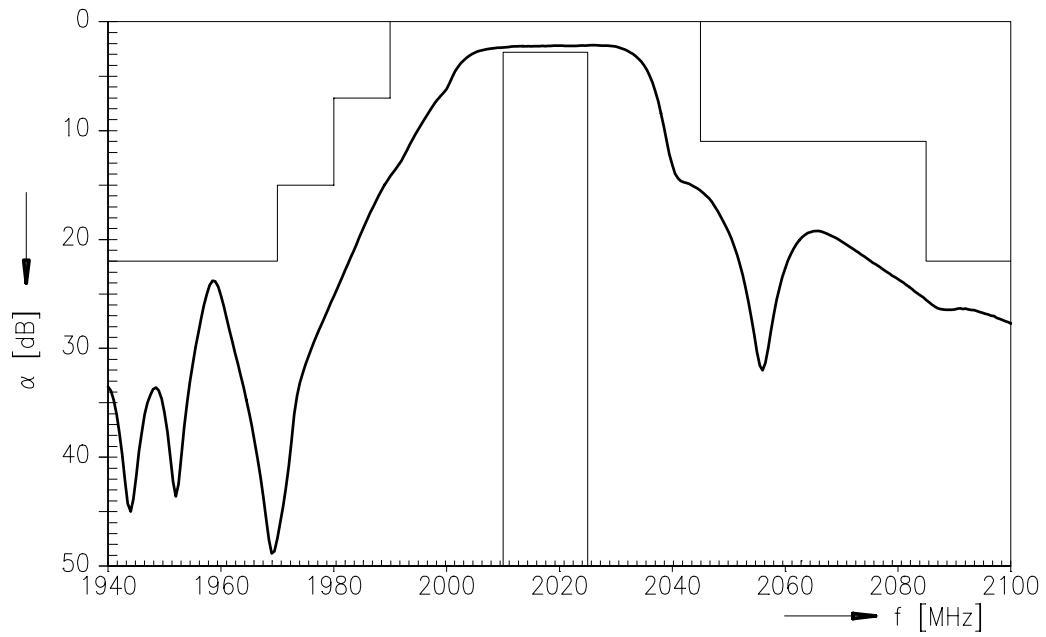
Low-Loss Filter for Mobile Communication

2017,5 MHz

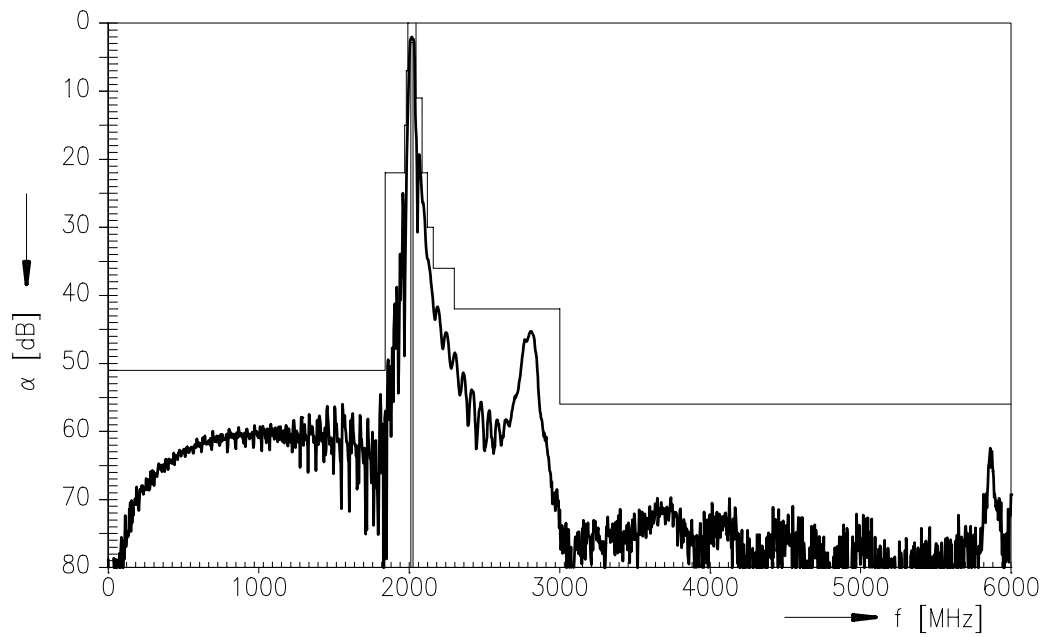
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Transfer function



Transfer function (wide band)





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