



# SAW Components

Data Sheet B7766

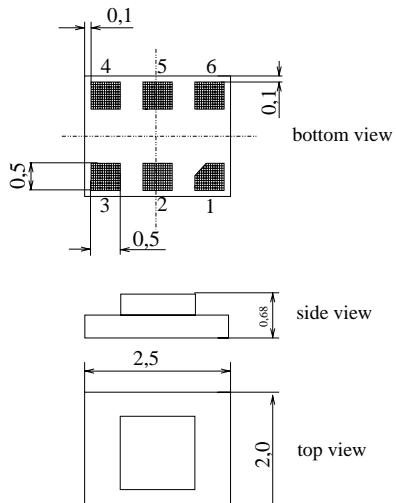
Data Sheet



**SAW Components**
**B7766**
**Low-Loss Filter**
**2441,75 MHz**
**Data Sheet**

**Features**

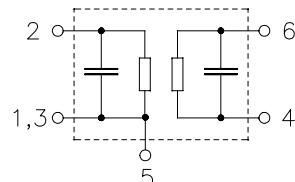
- Low-loss RF filter for bluetooth
- Usable passband 83,5 MHz
- Unbalanced to balanced operation
- Impedance transformation
- Package for **Surface Mounted Technology (SMT)**

**Chip Sized Saw Package DCS6K**


Dimensions in mm, approx. weight 0,010g

**Pin configuration**

2	Input, unbalanced
1, 3	Input ground
4, 6	Output, balanced
5	To be grounded



Type	Ordering code	Marking and Package according to	Packing according to
B7766	B39242-B7766-C911	C61157-A7-A123	F61074-V8153-Z000

**Electrostatic Sensitive Device (ESD)**
**Maximum ratings**

Operable temperature range	$T$	-40 /+ 85	°C	
Storage temperature range	$T_{stg}$	-40 /+ 85	°C	
DC voltage	$V_{DC}$	3,5	V	
ESD voltage	$V_{ESD}$	50*	V	Machine Model, 10 pulses
Input power max.				
2400...2483,5 MHz	$P_{IN}$	8	dBm	source/load impedance 50Ω /
824...849, 880...915 MHz		25		120Ω c.w.
1710..1785, 1850..1910 MHz		23		

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

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**Characteristics (matching for a chipset impedance of  $120\Omega \parallel 0,6\text{pF}$ )**Operating temperature range:  $T = -40$  to  $+85^\circ\text{C}$ Terminating source impedance:  $Z_S = 50\Omega \parallel 8,2\text{nH}$ Terminating load impedance:  $Z_L = (120\Omega \parallel 0,6\text{pF}) \parallel 3,9\text{nH}$  \*)

		<b>min.</b>	<b>typ.</b>	<b>max.</b>	
<b>Center frequency</b>	$f_c$	—	2441,75	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$	—	3,0	3,7	dB
	2400,0 ... 2483,5 MHz				
<b>Return loss</b>		—	9,0	—	dB
	2400,0 ... 2483,5 MHz				
<b>Amplitude ripple (p-p)</b>	$\Delta\alpha$	—	1,0	2,0	dB
	2400,0 ... 2483,5 MHz				
<b>Attenuation</b>	$\alpha$				
	500,0 ... 960,0 MHz	60	70	—	dB
	960,0 ... 1200,0 MHz	55	68	—	dB
	1200,0 ... 1501,0 MHz	50	61	—	dB
	1501,0 ... 1980,0 MHz	45	50	—	dB
	1980,0 ... 2170,0 MHz	35	39	—	dB
	2170,0 ... 2250,0 MHz	28	40	—	dB
	2700,0 ... 3000,0 MHz	20	34	—	dB
	3000,0 ... 4000,0 MHz	35	40	—	dB
	4000,0 ... 6000,0 MHz	35	56	—	dB

\*) equals  $120\Omega \parallel 8,2\text{nH}$



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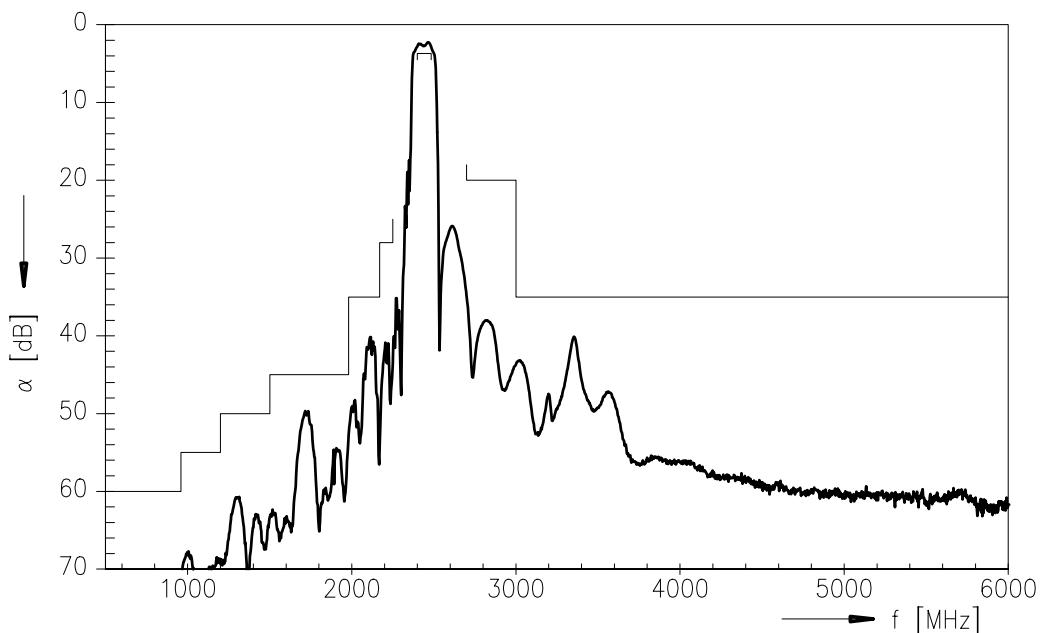
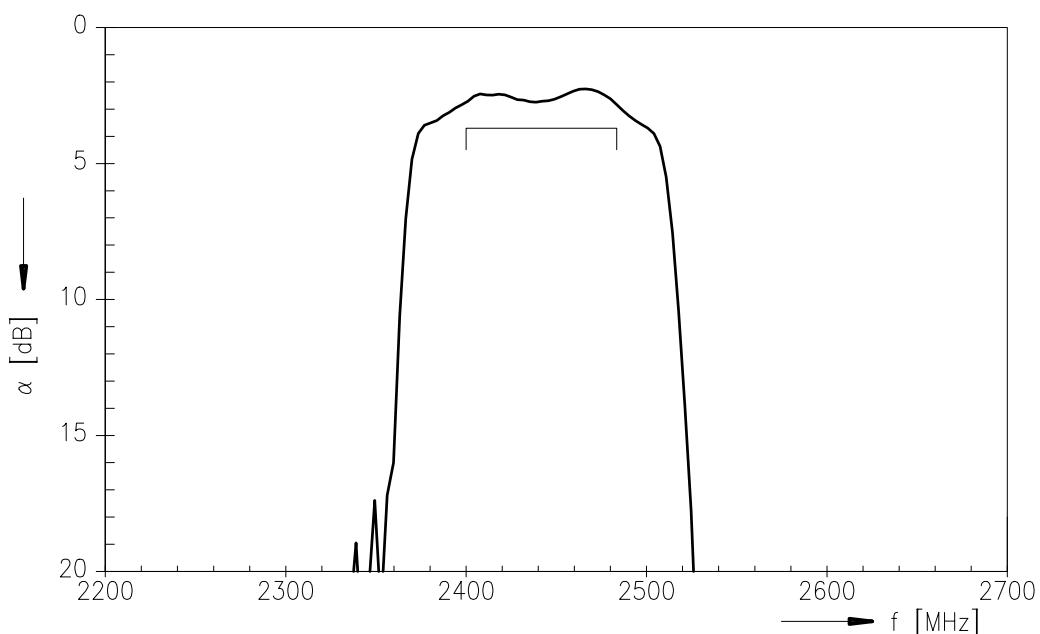
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### Transfer function





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