



# SAW Components

Data Sheet B7766





**SAW Components**

**B7766**

**Low-Loss Filter**

**2441,75 MHz**

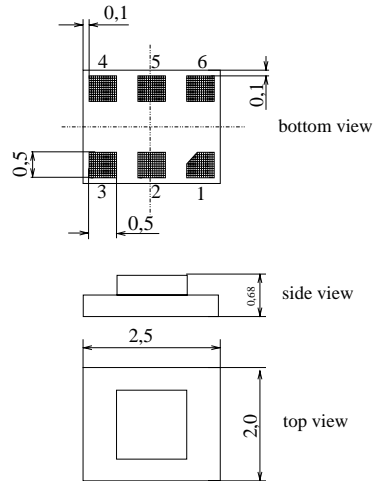
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**Chip Sized Saw Package DCS6K**

**Features**

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



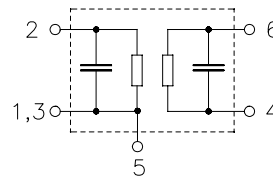
**Terminals**

- Ni, gold-plated

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

\* - acc. to JESD22-A115A (Machine Model), 10 negative & 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:  $Z_L = (120\ \Omega \parallel 0,6\text{pF}) \parallel 3,9\text{nH}$  \*)

		min.	typ.	max.	
<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>	$\alpha$				dB
500,0 ... 960,0 MHz		60	70	—	
960,0 ... 1200,0 MHz		55	68	—	
1200,0 ... 1501,0 MHz		50	61	—	
1501,0 ... 1980,0 MHz		45	50	—	
1980,0 ... 2170,0 MHz		35	39	—	
2170,0 ... 2250,0 MHz		28	40	—	
2700,0 ... 3000,0 MHz		20	34	—	
3000,0 ... 4000,0 MHz		35	40	—	
4000,0 ... 6000,0 MHz		35	56	—	

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



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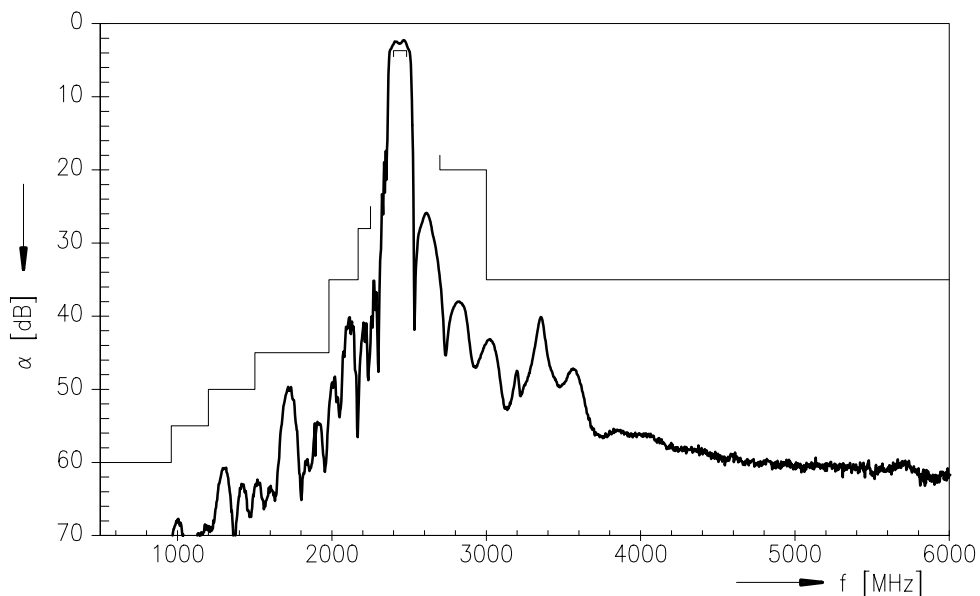
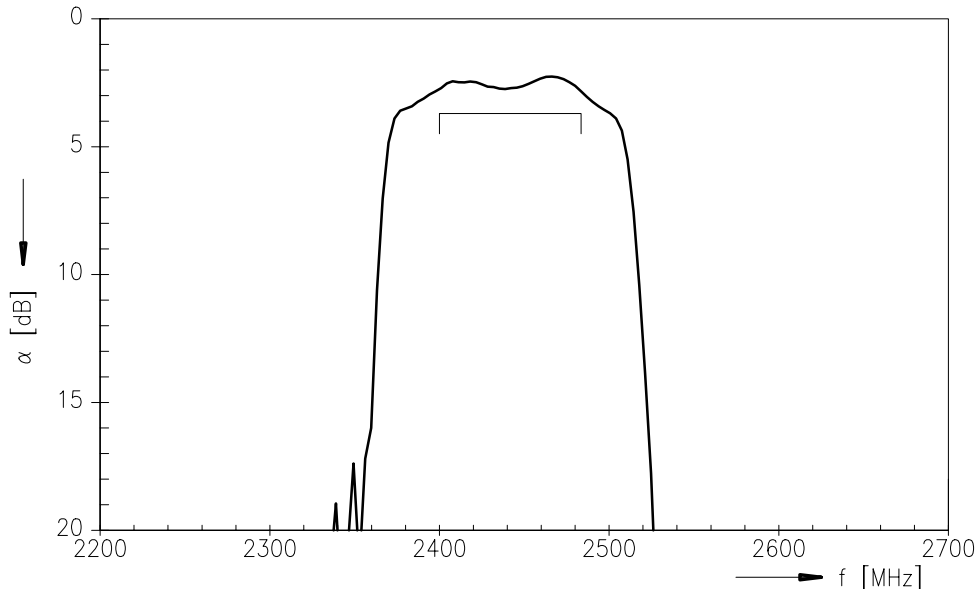
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### Transfer function





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