



# SAW Components

Data Sheet B7809





**SAW Components**

**B7809**

**Low-Loss Filter for Mobile Communication**

**2441,75 MHz**

Data Sheet



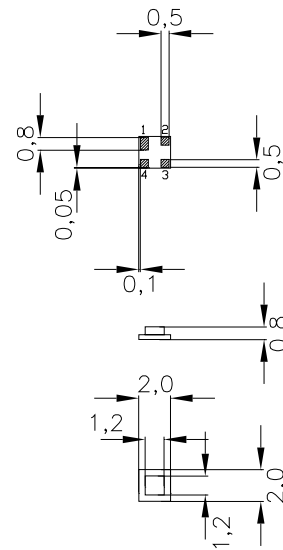
Chip sized SAW package

**Features**

- Low-loss RF filter for Bluetooth
- Low amplitude ripple
- Usable passband 83,5 MHz
- No matching network required for operation at 50 Ω
- Ceramic package for Surface Mounted Technology (SMT)

**Terminals**

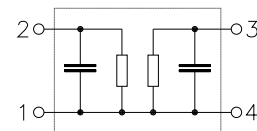
- Gold-plated Ni



Dimensions in mm, approx. weight 0,01 g

**Pin configuration**

- 2            Input
- 3            Output
- 1, 4        Ground



Type	Ordering code	Marking and Package according to	Packing according to
B7809	B39242-B7809-A510	C61157-A7-A63	F61074-V8099-Z000

Electrostatic Sensitive Device (ESD)

**Maximum ratings**

Operating temperature range	$T$	- 40/+ 85	°C	source impedance 50 Ω, 2400,0 ... 2483,5 MHz
Storage temperature range	$T_{stg}$	- 40/+ 85	°C	
DC voltage	$V_{DC}$	0	V	
Input Power max.	$P_{IN}$	15,0	dBm	



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**Characteristics**

Operating Temperature Range:  $T = -40^{\circ}\text{C}$  to  $85^{\circ}\text{C}$   
 Terminating source impedance:  $Z_S = 50\Omega$   
 Terminating load impedance:  $Z_L = 50\Omega$

		min.	typ.	max.	
<b>Center frequency</b>	$f_C$	—	2441,75	—	MHz
<b>Maximum insertion attenuation</b>	$\alpha_{\max}$				
2400,0 ... 2483,5 MHz		—	2,6	3,5	dB
<b>Amplitude ripple</b>	$\Delta\alpha$				
2400,0 ... 2483,5 MHz		—	1,2	2,2	dB
2400,0 ... 2483,5 MHz *)		—	1,2	2,0	dB
<b>Attenuation</b>	$\alpha$				
0,00 ... 1785,00 MHz		15	17	—	dB
1785,00 ... 1850,00 MHz		20	24	—	dB
1850,00 ... 1950,00 MHz		22	26	—	dB
1950,00 ... 2170,00 MHz		24	29	—	dB
2170,00 ... 2250,00 MHz		20	24	—	dB
2250,00 ... 2300,00 MHz		18	20	—	dB
2600,00 ... 3000,00 MHz		20	25	—	dB
3000,00 ... 4000,00 MHz		15	18	—	dB
4000,00 ... 5000,00 MHz		12	15	—	dB

\*)  $T = -30^{\circ}\text{C}$  to  $85^{\circ}\text{C}$



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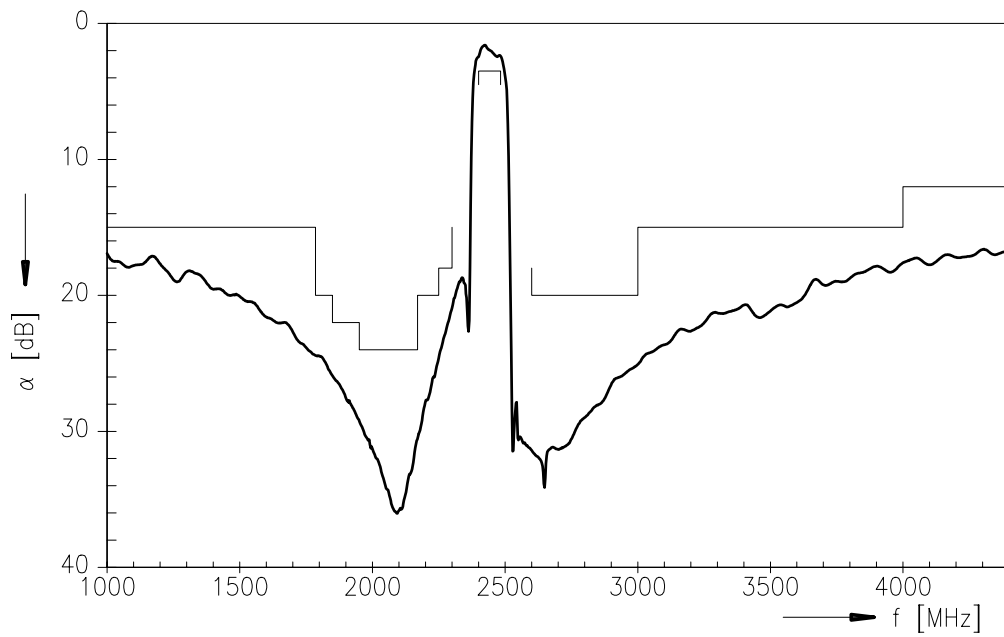
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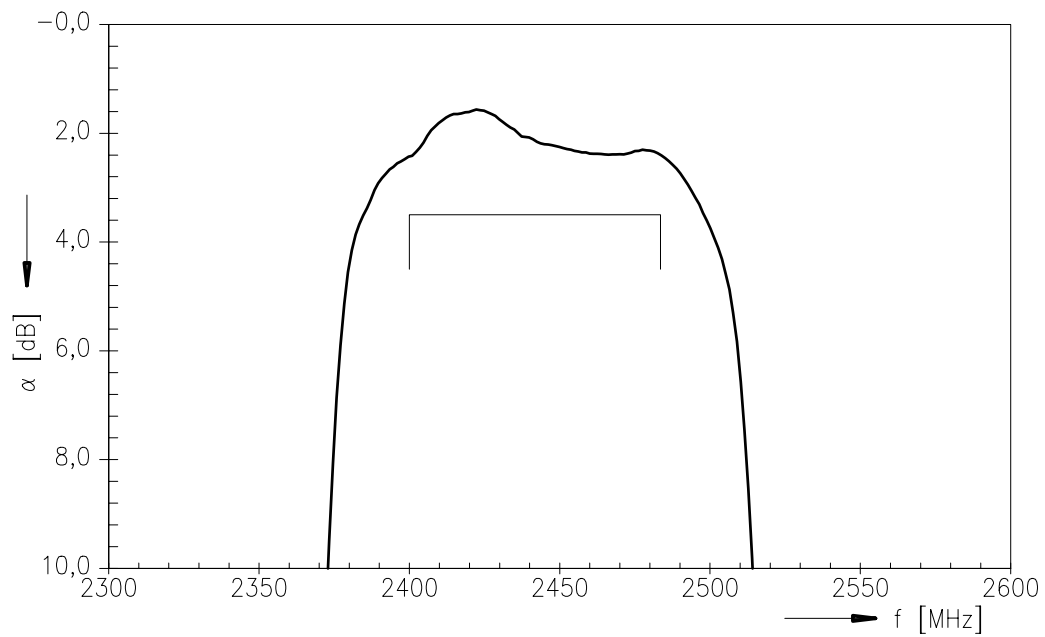
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### Transfer function



### Transfer function (passband)





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