



SAW Components

Data Sheet B7809

Data Sheet

An abstract, grayscale background graphic featuring a globe with a grid of latitude and longitude lines. Overlaid on the globe is a large, stylized, 3D-effect word "EPCOS" in a light gray color. The word is tilted and appears to be floating or emerging from the globe. The overall image has a soft, ethereal quality with some light flares and a dark, textured background.



SAW Components

B7809

Low-Loss Filter for Mobile Communication

2441,75 MHz

Data Sheet



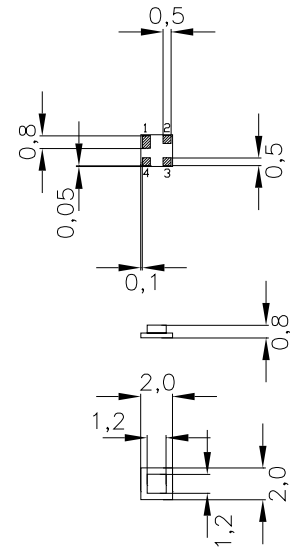
Chip sized SAW package

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

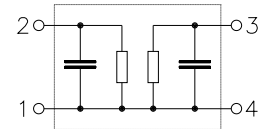
- Gold-plated Ni



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	$^{\circ}\text{C}$	source impedance 50 Ω , 2400,0 ... 2483,5 MHz
Storage temperature range	T_{stg}	- 40/+ 85	$^{\circ}\text{C}$	
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°C
Terminating source impedance: $Z_S = 50\Omega$
Terminating load impedance: $Z_L = 50\Omega$

		min.	typ.	max.	
Center frequency	f_C	—	2441,75	—	MHz
Maximum insertion attenuation	α_{\max}				
2400,0 ... 2483,5 MHz		—	2,6	3,5	dB
Amplitude ripple	$\Delta\alpha$				
2400,0 ... 2483,5 MHz		—	1,2	2,2	dB
2400,0 ... 2483,5 MHz *)		—	1,2	2,0	dB
Attenuation	α				
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°C



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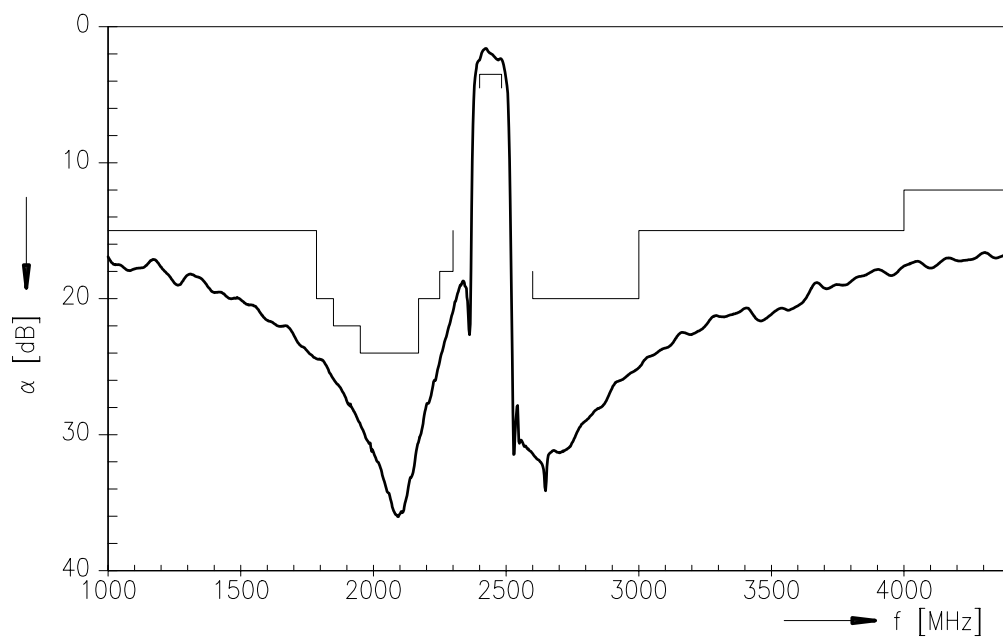
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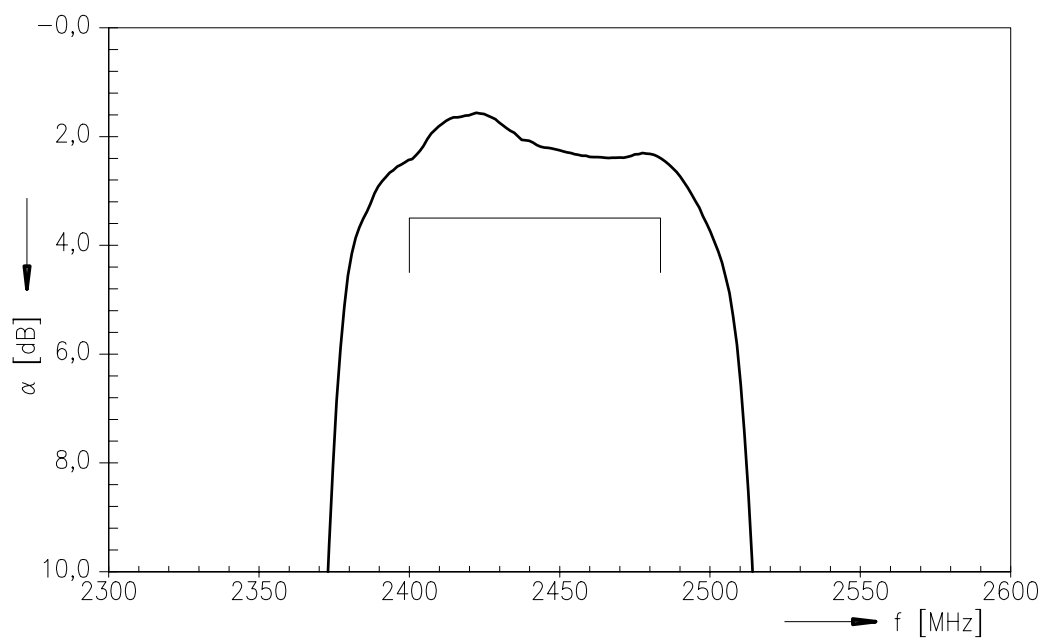
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Transfer function



Transfer function (passband)





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