



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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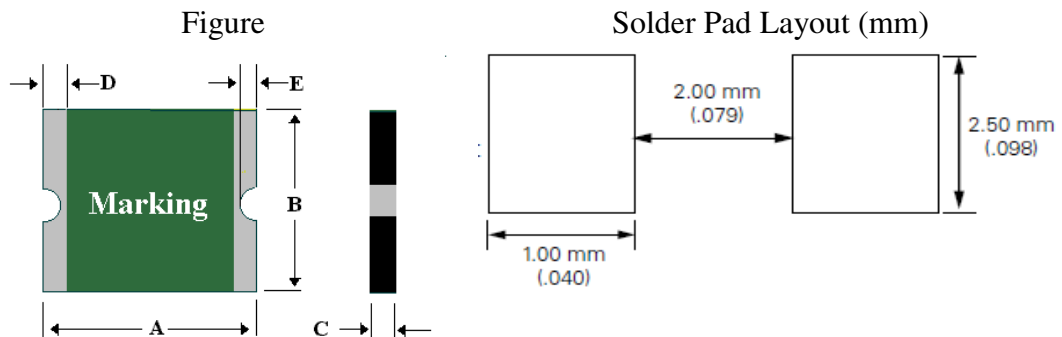
# Device Specification

## ELECTRICAL CHARACTERISTICS

Part Number	I <sub>hold</sub> (A)	I <sub>trip</sub> (A)	V <sub>max</sub> (Vdc)	I <sub>max</sub> (A)	Pd <sub>max</sub> (W)	Maximum Time-to-Trip		Resistance	
						Current (A)	Time (Sec.)	R <sub>min</sub> (Ω)	R <sub>1max</sub> (Ω)
1210L450SL	4.5	9.0	6	50	1.00	22.50	2.00	0.001	0.014
1210L500SL	5.0	10.0	6	50	1.20	25.00	2.00	0.001	0.012

- Note: I<sub>hold</sub> = Hold current: maximum current device will pass without tripping in 20°C still air.  
 I<sub>trip</sub> = Trip Current: minimum current at which the device will trip in 20°C still air.  
 V<sub>max</sub> = Maximum voltage device can withstand without damage at rated current (I<sub>max</sub>)  
 I<sub>max</sub> = Maximum fault current device can withstand without damage at rated voltage (V<sub>max</sub>)  
 Pd = Power dissipated from device when in the tripped state at 20°C still air.  
 R<sub>min</sub> = Minimum resistance of device in initial (un-soldered) state.  
 R<sub>1max</sub> = Maximum resistance of device at 20°C measured one hour after tripping or reflow soldering of 260°C for 20 sec.

**Caution** :Operation beyond the specified rating may result in damage and possible arcing and flame.



## PHYSICAL DIMENSIONS (mm)

Part Number	A		B		C		D		E	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
1210L450SL	3	3.43	2.35	2.80	0.60	0.80	0.25	0.75	0.10	0.50
1210L500SL	3	3.43	2.35	2.80	0.60	0.80	0.25	0.75	0.10	0.50

# THERMAL DERATING CHART – $I_{\text{hold}}/I_{\text{trip}}$ (Amps)

## Recommended Data

Part Number		Ambient Operation Temperature								
		-40°C	-20°C	0°C	23°C	40°C	50°C	60°C	70°C	85°C
1210L450SL	$I_{\text{hold}}$	6.35	5.70	5.15	4.50	3.60	3.30	3.00	2.55	1.90
	$I_{\text{trip}}$	12.9	11.5	10.4	9.00	7.35	6.70	6.00	5.15	3.90
1210L500SL	$I_{\text{hold}}$	7.05	6.30	5.70	5.00	4.25	3.80	3.30	2.80	2.10
	$I_{\text{trip}}$	14.10	12.60	11.40	10.00	8.50	7.60	6.60	5.60	4.20