

Polymer PTC Re-settable Fuse For LA Series

Features

- ✧ Special designs to meet customs' appropriate applications
- ✧ Compatible with auto industry standards
- ✧ Over-current and over-temperature protection
- ✧ Helps protect circuits from over-current damage
- ✧ Meet AEC-Q200 Standards



Range of application

Circuits protection in cars and its peripheral parts.

Product Dimensions Figures

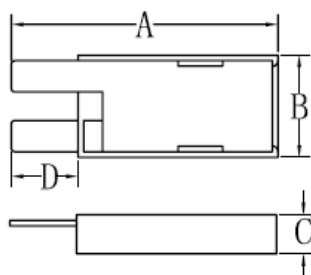


Fig.1

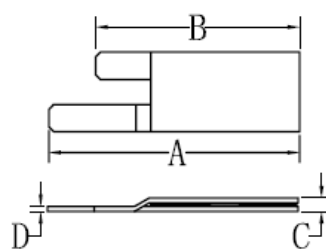


Fig.2

Product Dimensions Data Sheets

Unit: mm

Part number	A		B		C	D		Figure
	Min	Max	Min	Max	Max	Min	Max	
LA-A2111	25.60	26.00	20.75	21.15	1.20	1.80	0.40	Fig.2
LA-A1308	14.00	14.50	14.00	14.50	1.20	1.80	0.40	Fig.2
LA-A1508	25.60	26.00	20.75	21.15	1.20	1.80	0.40	Fig.2
LA-B1508	25.60	26.00	20.75	21.15	1.20	1.80	0.40	Fig.2
LA-C1508	25.60	26.00	20.75	21.15	1.20	1.80	0.40	Fig.2
LA-D1508	25.60	26.00	20.75	21.15	1.20	1.80	0.40	Fig.2
LA-E1508	19.80	20.60	15.70	16.30	1.20	1.80	0.40	Fig.2
LA-F1508	19.80	20.60	15.70	16.30	1.20	1.80	0.40	Fig.2
LA-G1508	14.65	16.65	14.65	16.65	1.20	1.80	0.40	Fig.2
SA-A1508	22.00	24.00	8.00	11.50	3.80	0.40	0.60	Fig.1

Materials

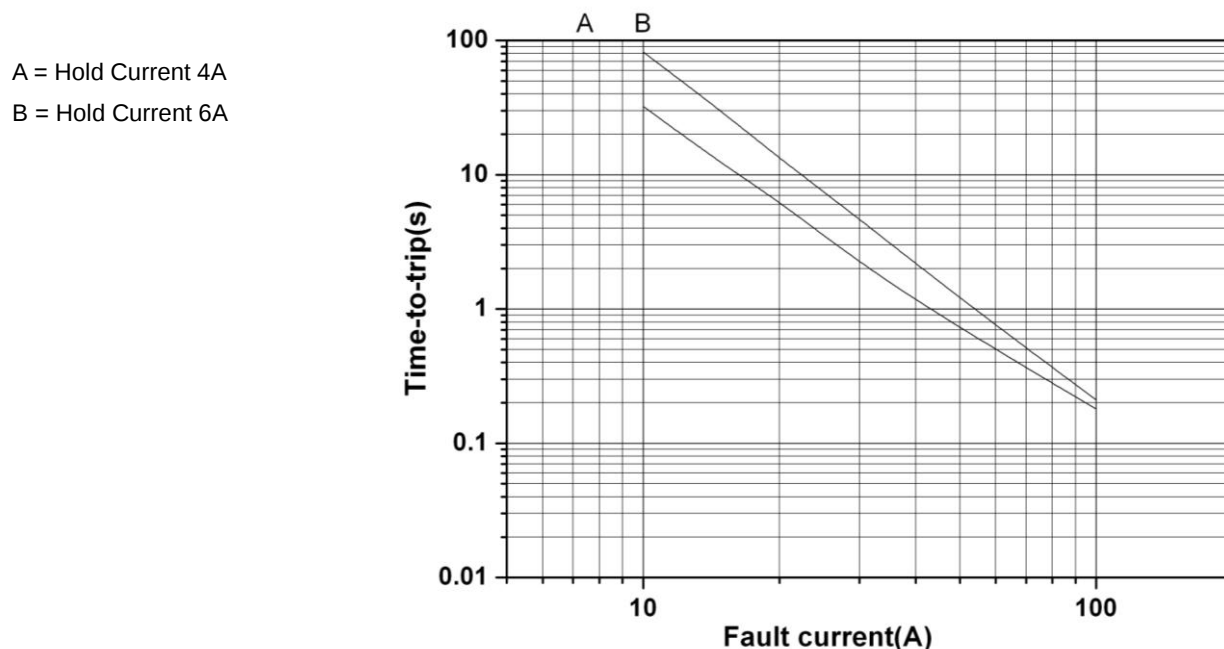
Series \\Parts(Functions)	LA	SA
PPTC Body (Temperature sensitive resist)	Carbon, PVDF	Carbon, PVDF
Electrode on PPTC Body (Surface Electrode of PPTC Body)	Ni plated Copper	Ni plated Copper
Lead (Terminate of the PPTC devices)	H65 Cu	H65 Cu
Solder paste (Connect Electrode and the Lead)	Sn-Ag(3%)-Cu(0.5%)	
Coating (Insulation)	None	Engineering-plastics

Electrical Characteristic

Part number	I _H	I _T	V _{max}	I _{max}	P _{dtype}	Maximum Time To Trip		R _{min}	R _{1max}
	(A)	(A)	(V)	(A)	(W)	Current (A)	Time (S)	(Ω)	(Ω)
LA-A2111	6.00	12.00	14	50	6	30.00	5~30	0.010	0.020
LA-A1308	4.00	8.00	14	50	5.5	20.00	5~30	0.010	0.020
LA-A1508	4.00	8.00	16	50	4.5	15.00	4~12	0.020	0.040
LA-B1508	4.00	8.00	16	50	5	15.00	7~30	0.015	0.030
LA-C1508	4.00	8.00	14	50	5	20.00	4~12	0.010	0.020
LA-D1508	4.00	8.00	14	50	5	20.00	7~30	0.010	0.020
LA-E1508	4.00	8.00	14	50	5	25.00	4~12	0.010	0.020
LA-F1508	4.00	8.00	14	50	5.5	25.00	7~15	0.008	0.016
LA-G1508	4.00	8.00	14	50	5	25.00	7~60	0.008	0.016
SA-A1508	4.00	8.00	16	50	4.5	15.00	4~25	0.020	0.040

Thermal Derating Chart-IH(A)

Part Number	Maximum ambient operating temperature (°C)									
	-40	-20	0	25	40	50	60	70	85	125
LA-A2111	9.00	8.10	7.15	6.00	5.26	4.80	4.32	3.86	3.15	1.28
LA-A1308	6.00	5.38	4.75	4.00	3.51	3.19	2.88	2.57	2.10	0.86
LA-A1508	6.00	5.38	4.75	4.00	3.51	3.19	2.88	2.57	2.10	0.86
LA-B1508	6.00	5.38	4.75	4.00	3.51	3.19	2.88	2.57	2.10	0.86
LA-C1508	6.00	5.38	4.75	4.00	3.51	3.19	2.88	2.57	2.10	0.86
LA-D1508	6.00	5.38	4.75	4.00	3.51	3.19	2.88	2.57	2.10	0.86
LA-E1508	6.00	5.38	4.75	4.00	3.51	3.19	2.88	2.57	2.10	0.86
LA-F1508	6.00	5.38	4.75	4.00	3.51	3.19	2.88	2.57	2.10	0.86
LA-G1508	6.00	5.38	4.75	4.00	3.51	3.19	2.88	2.57	2.10	0.86
SA-A1508	6.00	5.38	4.75	4.00	3.51	3.19	2.88	2.57	2.10	0.86



Test Procedures And Requirements

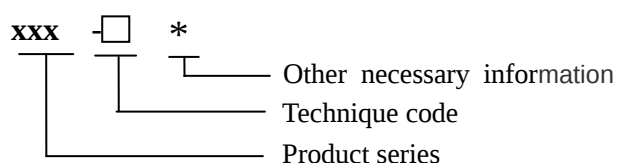
Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @ 25°C	$R_{min} \leq R \leq R_{1max}$
Time to Trip	Specified current, V_{max} , 25°C	$T \leq$ maximum Time to Trip
Hold Current	30min, at I_H	No trip
Trip Cycle Life	V_{max} , I_{max} , 2000cycles	No arcing or burning
Trip Endurance	V_{max} , 12hours	No arcing or burning

Environmental Specifications

Environmental Specifications

Test	Conditions	Resistance Change
Passive aging	-40℃,1000hours	±20%
	125℃,1000hours	±20%
Humidity aging	85℃/95% RH,1000hours	±30%
Thermal shock	85℃/-40℃, 10cycles	±30%

Part Numbering System



☐ - Maybe f/b A to Z (LA/SA) or hold current value(Others)

* - Maybe f/b Chip Size in mm(LA/SA) or F or blank

Electrical Specifications:

I_H =Hold current: maximum current at which the device will not trip at 25°C still air.

I_T =Trip current: minimum current at which the device will always trip at 25°C still air.

V_{max} =Maximum voltage device can withstand without damage at rated current.

I_{max} =Maximum fault current device can withstand without damage at rated voltage.

T_{trip} =Maximum time to trip(s) at assigned current.

R_{min} =Minimum device resistance at 25°C prior to tripping.

$R1_{max}$ =Maximum device resistance after 1cycle trip.

Storage

The maximum ambient temperature shall not exceed 40°C. Storage temperatures higher than 40°C could result in the deformation of packaging materials. The maximum relative humidity recommended for storage is 70%. High humidity with high temperature can accelerate the oxidation of the solder plating on the termination and reduce the weldability of the components. Sealed plastic bags with desiccant shall be used to reduce the oxidation of the termination and shall only be opened prior to use. The products shall not be stored in areas where harmful gases containing sulfur or chlorine are present.

Warning:

PPTC devices are intended for protection against occasional over-current or over-temperature fault conditions, and should not be used when repeated fault conditions are anticipated. Operation beyond maximum ratings or improper use may result in device damage and possible electrical arcing and flame.

Notes:

The specification is intended to present application, product and technical data to assist the user in selecting PPTC circuit production devices. However, users should independently evaluate and test the suitability of each product. Wayon makes no warranties as to the accuracy or completeness of the information and disclaims any liability resulting from its use. Wayon's only obligations are those in the Wayon Standard Terms and Conditions of Sale and in no case will Wayon be liable for any incidental, indirect, or consequential damages arising from the sale, resale, or misuse of its products. Wayon reserves the right to change or update, without notice, any information contained in this specification.

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