



## Features

**SEL-USE**

Radial leaded devices

Cured, flame retardant epoxy polymer insulating material meets UL94 V-0 requirements

Available in lead-free version

Agency Recognition: UL CSA TUV

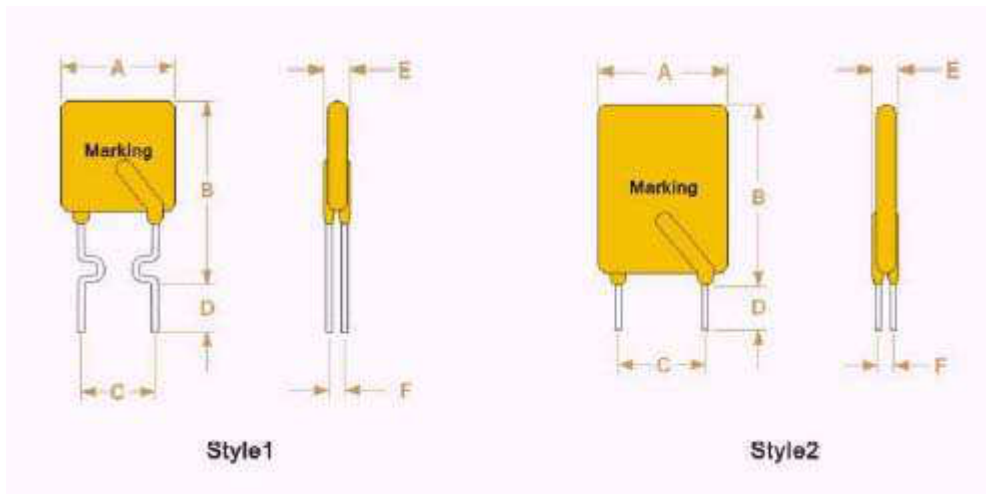


**LP30** series

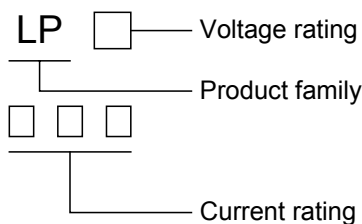
R-line devices

## Product Dimensions

Part number	A	B	C	D	E	F	Lead	
	Max.	Max.	Typ.	Min.	Max.	Typ.	Style	Size(φ)
LP30-090	6.0	13.8	5.1	7.6	3.0	0.9	1	0.6
LP30-110	7.8	14.0	5.1	7.6	3.0	0.9	1	0.6
LP30-135	8.9	14.0	5.1	7.6	3.0	0.9	1	0.6
LP30-160	9.7	17.0	5.1	7.6	3.0	0.9	1	0.6
LP30-185	10.7	17.0	5.1	7.6	3.0	0.9	1	0.6
LP30-250	11.7	19.0	5.1	7.6	3.0	0.9	1	0.6
LP30-300	11.7	21.0	5.1	7.6	3.0	1.2	2	0.8
LP30-400	14.2	23.0	5.1	7.6	3.0	1.2	2	0.8
LP30-500	14.4	28.0	10.2	7.6	3.0	1.2	2	0.8
LP30-600	16.7	28.0	10.2	7.6	3.0	1.2	2	0.8
LP30-700	19.4	29.6	10.2	7.6	3.0	1.2	2	0.8
LP30-800	21.6	31.9	10.2	7.6	3.0	1.2	2	0.8
LP30-900	24.5	36.4	10.2	7.6	3.0	1.2	2	0.8



## Marking system



\* Lead materials: Tin-plate metal wire.

\* Lead-free devices are available, the right logo is lead-free mark of wayon.



## Electrical Characteristics

Part number	I <sub>H</sub> (A)	I <sub>T</sub> (A)	T <sub>trip</sub>		V <sub>max</sub> (V)	I <sub>max</sub> (A)	Pd <sub>typ</sub> (W)	R <sub>min</sub> (Ohm)	R <sub>max</sub> (Ohm)
			Current(A)	Time(S)					
LP30-090	0.90	1.80	4.50	7.1	30	40	0.91	0.07	0.12
LP30-110	1.10	2.20	5.50	6.6	30	40	1.00	0.05	0.10
LP30-135	1.35	2.70	6.75	7.3	30	40	1.11	0.04	0.08
LP30-160	1.60	3.20	8.00	8.0	30	40	1.20	0.03	0.07
LP30-185	1.85	3.70	9.25	8.7	30	40	1.27	0.03	0.06
LP30-250	2.50	5.00	12.50	10.3	30	40	1.34	0.02	0.04
LP30-300	3.00	6.00	15.00	10.8	30	40	2.00	0.02	0.05
LP30-400	4.00	8.00	20.00	12.7	30	40	2.50	0.01	0.03
LP30-500	5.00	10.00	25.00	14.5	30	40	3.00	0.01	0.03
LP30-600	6.00	12.00	30.00	16.0	30	40	3.50	0.005	0.02
LP30-700	7.00	14.00	35.00	17.5	30	40	3.80	0.005	0.02
LP30-800	8.00	16.00	40.00	18.8	30	40	4.00	0.005	0.02
LP30-900	9.00	18.00	40.00	20.0*	30	40	4.20	0.005	0.01

I<sub>H</sub>=Hold current: maximum current at which the device will not trip at 25 C still air.

I<sub>T</sub>=Trip current: minimum current at which the device will always trip at 25 C still air.

T<sub>trip</sub>=Maximum time to trip at assigned current.

V<sub>max</sub>=Maximum voltage device can withstand without damage at rated current.

I<sub>max</sub>=Maximum fault current device can withstand without damage at rated voltage.

Pd<sub>typ</sub>=Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

R<sub>min</sub>=Minimum device resistance at 25 C prior to tripping.

R<sub>max</sub>=Maximum device resistance at 25 C prior to tripping.

## Thermal Derating Chart-I<sub>H</sub>(A)

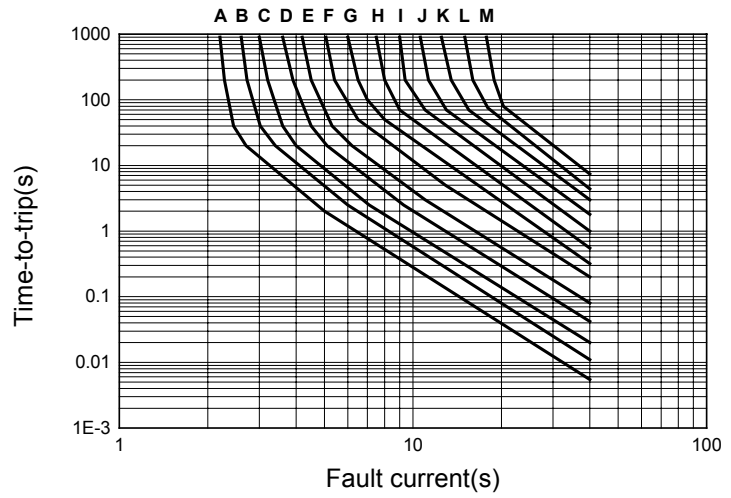
Part number	Maximum ambient operating temperatures( C )								
	-40	-20	0	25	40	50	60	70	85
LP30-090	1.40	1.25	1.10	0.90	0.75	0.69	0.65	0.60	0.50
LP30-110	1.75	1.52	1.33	1.10	0.99	0.90	0.80	0.73	0.63
LP30-135	2.15	1.94	1.70	1.35	1.20	1.14	1.00	0.90	0.81
LP30-160	2.49	2.21	1.94	1.60	1.42	1.31	1.19	1.03	0.88
LP30-185	2.87	2.59	2.28	1.85	1.63	1.52	1.33	1.21	1.05
LP30-250	3.82	3.44	3.03	2.50	2.17	2.00	1.81	1.59	1.39
LP30-300	4.55	4.10	3.60	3.00	2.65	2.51	2.24	2.01	1.74
LP30-400	6.00	5.40	4.74	4.00	3.47	3.28	2.82	2.63	2.26
LP30-500	7.44	6.68	5.80	5.00	4.30	4.03	3.58	3.22	2.77
LP30-600	8.90	7.99	7.08	6.00	5.13	4.82	4.27	3.84	3.30
LP30-700	10.35	9.30	8.21	7.00	5.95	5.58	4.96	4.46	3.84
LP30-800	11.60	10.60	9.35	8.00	6.79	6.36	5.64	5.07	4.36
LP30-900	13.25	11.90	10.49	9.00	7.53	7.12	6.32	5.69	4.88

## Test Procedures And Requirements

Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @ 25 C	R <sub>min</sub> < R < R <sub>max</sub>
Time to Trip	Specified current, V <sub>max</sub> , 25 C	T < maximum Time to Trip
Hold Current	30min, at I <sub>H</sub>	No trip
Trip Cycle Life	V <sub>max</sub> , I <sub>max</sub> , 100cycles	No arcing or burning
Trip Endurance	V <sub>max</sub> , 24hours	No arcing or burning

## Typical Time-to-Trip Charts at 25 C

A=LP30-090  
 B=LP30-110  
 C=LP30-135  
 D=LP30-160  
 E=LP30-185  
 F=LP30-250  
 G=LP30-300  
 H=LP30-400  
 I=LP30-500  
 J=LP30-600  
 K=LP30-700  
 L=LP30-800  
 M=LP30-900



## Package Information

### Bulk:

LP30-090~LP30-185.....1000pcs per bag  
 LP30-250~LP30-800.....500pcs per bag  
 LP30-900.....200pcs per bag

### Tape & Reel:

LP30-090~LP30-160.....3000pcs per reel  
 LP30-185~LP30-400.....1500pcs per reel

### Notices:

The devices are intended for protection against occasional overcurrent or overtemperature 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.