

LP30 series

R-line Device

Features

- ☐ Radial leaded devices
- ☐ Cured, flame retardant epoxy polymer insulating material meets UL94 V-0 requirements
- ☐ Lead-free and compliant with the European Union RoHS Directive 2002/95/EC
- ☐ Agency Recognition: UL、CSA、TUV



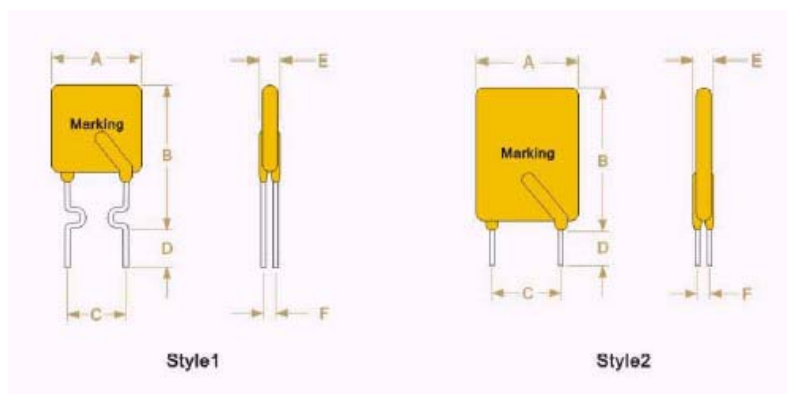
Applications

- ☐ Power supply
- ☐ High capability battery
- ☐ Motors and Wire harness
- ☐ USB ports
- ☐ Linear AC/DC adapters
- ☐ Transformers

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.

Electrical Characteristics

Part number	I_H (A)	I_T (A)	T_{trip} Current(A) Time(S)	V_{max} (V)	I_{max} (A)	Pd_{typ} (W)	R_{min} (Ω)	R_{max} (Ω)
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_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.

$V_{\max \text{ interrupt}}$ =Maximum interrupt 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 at assigned current.

$P_{d\text{typ}}$ =Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

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

$R_{\max}$ =Maximum device resistance at 25°C prior to tripping.

Thermal Derating Chart-Ih(A)

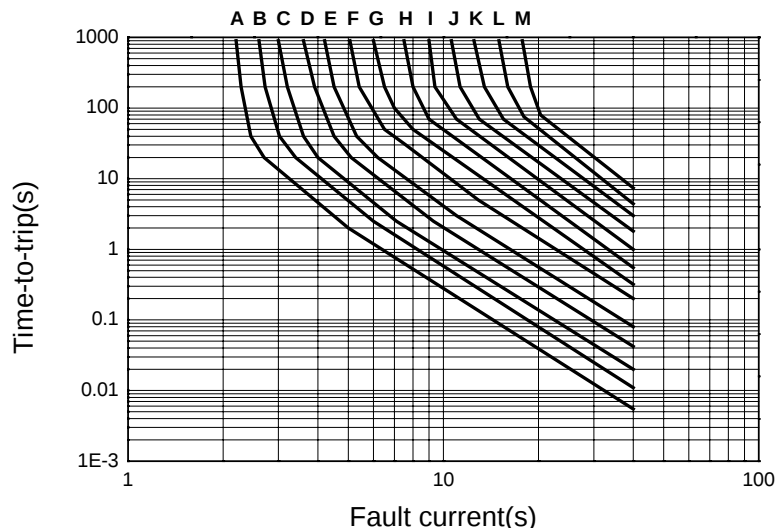
Part number	Maximum ambient operating temperatures(°C)								
	-40	-20	0	25	40	50	60	70	85
LP30-090	1.40	1.25	1.10	0.90	0.75	0.69	0.65	0.60	0.50
LP30-110	1.75	1.52	1.33	1.10	0.99	0.90	0.80	0.73	0.63
LP30-135	2.15	1.94	1.70	1.35	1.20	1.14	1.00	0.90	0.81
LP30-160	2.49	2.21	1.94	1.60	1.42	1.31	1.19	1.03	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	$R_{\min} \leq R \leq R_{\max}$
Time to Trip	Specified current, $V_{\max}$, 25°C	$T \leq \text{maximum Time to Trip}$
Hold Current	30min, at I_H	No trip
Trip Cycle Life	$V_{\max}$, $I_{\max}$, 100cycles	No arcing or burning
Trip Endurance	$V_{\max}$, 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.

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