

Features

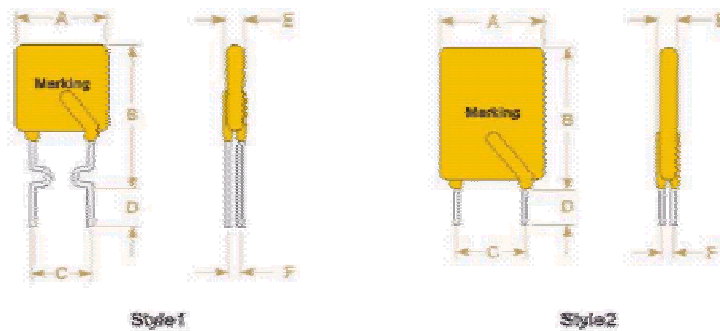
- Radial leaded devices
- Rated voltage up to 33V to meet broader applications
- Cured, flame retardant epoxy polymer insulating material meets UL94 V-0 requirements
- Available in lead-free version



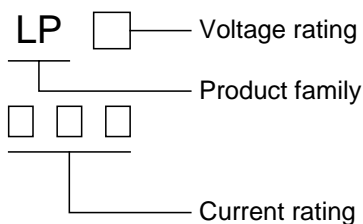
LP33 *series* *R-line devices*

Product Dimensions(mm)

Part number	A	B	C	D	E	F	Lead	
	Max.	Max.	Typ.	Min.	Max.	Typ.	Style	Size()
LP33-090	6.0	13.8	5.1	7.6	3.0	0.9	1	0.6
LP33-110	7.8	14.0	5.1	7.6	3.0	0.9	1	0.6
LP33-120	7.4	12.2	5.1	7.6	3.0	0.9	1	0.6
LP33-135	7.4	14.2	5.1	7.6	3.0	0.9	1	0.6
LP33-160	9.7	17.0	5.1	7.6	3.0	0.9	1	0.6
LP33-185	10.7	17.0	5.1	7.6	3.0	0.9	1	0.6
LP33-190	8.9	13.5	5.1	7.6	3.0	0.9	1	0.6
LP33-250	11.7	19.0	5.1	7.6	3.0	0.9	1	0.6
LP33-300	11.7	21.0	5.1	7.6	3.0	1.2	2	0.8
LP33-400	14.2	23.0	5.1	7.6	3.0	1.2	2	0.8
LP33-500	14.4	28.0	10.2	7.6	3.0	1.2	2	0.8
LP33-600	16.7	28.0	10.2	7.6	3.0	1.2	2	0.8
LP33-700	19.4	29.6	10.2	7.6	3.0	1.2	2	0.8
LP33-800	21.6	31.9	10.2	7.6	3.0	1.2	2	0.8
LP33-900	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 _H (A)	I _T (A)	T _{trip} (S)	V _{max} (V)	I _{max} (A)	Pd _{typ} (W)	R _{min} ()	R _{max} ()
LP33-090	0.90	1.80	7.1	33	40	0.91	0.070	0.12
LP33-110	1.10	2.20	6.6	33	40	1.00	0.050	0.10
LP33-120	1.20	2.30	3.5	33	40	0.78	0.074	0.12
LP33-135	1.35	2.50	4.5	33	40	0.84	0.059	0.10
LP33-160	1.60	3.20	8.0	33	40	1.20	0.030	0.07
LP33-185	1.85	3.70	8.7	33	40	1.27	0.030	0.06
LP33-190	1.90	3.00	3.5	33	40	0.90	0.045	0.063
LP33-250	2.50	5.00	10.3	33	40	1.34	0.020	0.04
LP33-300	3.00	6.00	10.8	33	40	2.00	0.020	0.05
LP33-400	4.00	8.00	12.7	33	40	2.50	0.010	0.03
LP33-500	5.00	10.00	14.5	33	40	3.00	0.010	0.03
LP33-600	6.00	12.00	16.0	33	40	3.50	0.005	0.02
LP33-700	7.00	14.00	17.5	33	40	3.80	0.005	0.02
LP33-800	8.00	16.00	18.8	33	40	4.00	0.005	0.02
LP33-900	9.00	18.00	20.0*	33	40	4.20	0.005	0.01

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

I_T=Trip current: minimum current at which the device will always trip at 25 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.

Pd_{typ}=Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

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

R_{max}=Maximum device resistance at 25 prior to tripping.

Thermal Derating Chart-I_H(A)

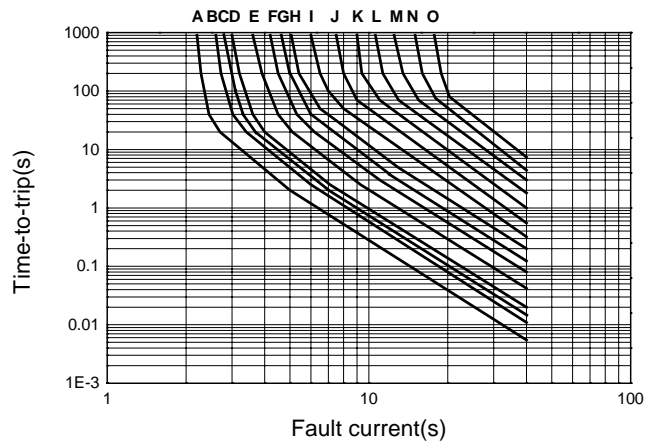
Part number	Maximum ambient operating temperatures()								
	-40	-20	0	25	40	50	60	70	85
LP33-090	1.40	1.25	1.10	0.90	0.75	0.69	0.65	0.60	0.50
LP33-110	1.75	1.52	1.33	1.10	0.99	0.90	0.80	0.73	0.63
LP33-120	1.74	1.56	1.38	1.20	1.00	0.92	0.82	0.73	0.60
LP33-135	1.96	1.76	1.55	1.35	1.12	1.04	0.92	0.82	0.68
LP33-160	2.49	2.21	1.94	1.60	1.42	1.31	1.19	1.03	0.88
LP33-185	2.87	2.59	2.28	1.85	1.63	1.52	1.33	1.21	1.05
LP33-190	2.76	2.47	1.55	1.90	1.58	1.50	1.29	1.16	0.95
LP33-250	3.82	3.44	3.03	2.50	2.17	2.00	1.81	1.59	1.39
LP33-300	4.55	4.10	3.60	3.00	2.65	2.51	2.24	2.01	1.74
LP33-400	6.00	5.40	4.74	4.00	3.47	3.28	2.82	2.63	2.26
LP33-500	7.44	6.68	5.80	5.00	4.30	4.03	3.58	3.22	2.77
LP33-600	8.90	7.99	7.08	6.00	5.13	4.82	4.27	3.84	3.30
LP33-700	10.35	9.30	8.21	7.00	5.95	5.58	4.96	4.46	3.84
LP33-800	11.60	10.60	9.35	8.00	6.79	6.36	5.64	5.07	4.36
LP33-900	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	R _{min} R R _{max}
Time to Trip	Specified current, V _{max} , 25	T 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

A=LP33-090
 B=LP33-110
 C=LP33-120
 D=LP33-135
 E=LP33-160
 F=LP33-185
 G=LP33-190
 H=LP33-250
 I=LP33-300
 J=LP33-400
 K=LP33-500
 L=LP33-600
 M=LP33-700
 N=LP33-800
 O=LP33-900



Package Information

Bulk:

LP33-090~LP33-185.....1000pcs per bag
 LP33-250~LP33-800.....500pcs per bag
 LP33-900.....200pcs per bag

Tape & Reel:

LP33-090~LP33-160.....3000pcs per reel
 LP33-185~LP33-400.....1500pcs per reel