

Features

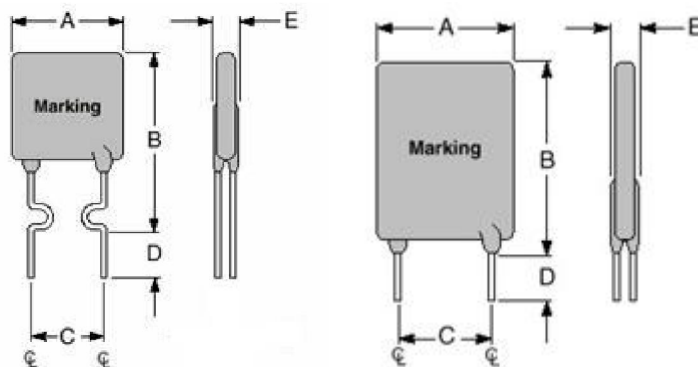
- Radial leaded devices
- Rated voltage up to 33V
- UL94 V-0 insulating material
- Agency Recognition: UL、CSA
- Lead-free and compliant with the European Union RoHS Directive 2011/65/EU



LP33 series

Product Dimensions

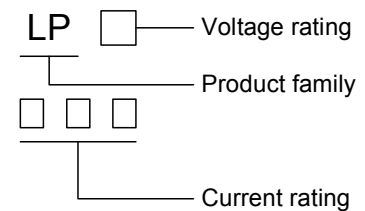
Part number	A		B		C		D		E		Lead	
	Max.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Style	Size(φ)		
LP33-090F	6.0	13.0	4.4	5.8	7.6	3.0	1	0.6				
LP33-110F	6.0	14.0	4.4	5.8	7.6	3.0	1	0.6				
LP33-120F	7.4	12.2	4.4	5.8	7.6	3.0	1	0.6				
LP33-135F	8.2	14.0	4.4	5.8	7.6	3.0	1	0.6				
LP33-160F	8.0	15.5	4.4	5.8	7.6	3.0	1	0.6				
LP33-185F	9.0	16.5	4.4	5.8	7.6	3.0	1	0.6				
LP33-190F	9.0	16.5	4.4	5.8	7.6	3.0	1	0.6				
LP33-250F	9.0	19.0	4.4	5.8	7.6	3.0	1	0.6				
LP33-300F	11.0	17.0	4.4	5.8	7.6	3.0	2	0.8				
LP33-400F	14.2	19.5	4.4	5.8	7.6	3.0	2	0.8				
LP33-500F	15.1	21.1	9.5	10.9	7.6	3.0	2	0.8				
LP33-600F	15.1	24.1	9.5	10.9	7.6	3.0	2	0.8				
LP33-700F	17.0	30.0	9.5	10.9	7.6	3.0	2	0.8				
LP33-800F	18.0	31.0	9.5	10.9	7.6	3.0	2	0.8				
LP33-900F	23.5	28.5	9.5	10.9	7.6	3.0	2	0.8				



Style1

Style2

Marking system



* Lead materials: Tin-plate metal wire

Electrical Characteristics

Part number	I _H (A)	I _T (A)	Max.Time-to-trip (A) (S)		V _{max} (V)	I _{max} (A)	Pd _{typ} (W)	R _{min} (Ω)	R _{max} (Ω)	R _{1max} (Ω)
LP33-090F	0.90	1.80	4.50	7.1	33	40	0.91	0.070	0.120	0.220
LP33-110F	1.10	2.20	5.50	6.6	33	40	1.00	0.050	0.100	0.170
LP33-120F	1.20	2.40	6.00	3.5	33	40	0.78	0.074	0.120	0.180
LP33-135F	1.35	2.70	6.75	4.5	33	40	0.84	0.059	0.100	0.143
LP33-160F	1.60	3.20	8.00	8.0	33	40	1.20	0.030	0.070	0.110
LP33-185F	1.85	3.70	9.25	8.7	33	40	1.27	0.030	0.060	0.090
LP33-190F	1.90	3.80	9.50	3.5	33	40	0.90	0.045	0.063	0.092
LP33-250F	2.50	5.00	12.50	10.3	33	40	1.34	0.020	0.040	0.070
LP33-300F	3.00	6.00	15.00	10.8	33	40	2.00	0.020	0.050	0.080
LP33-400F	4.00	8.00	20.00	12.7	33	40	2.50	0.010	0.030	0.050
LP33-500F	5.00	10.00	25.00	14.5	33	40	3.00	0.010	0.030	0.050
LP33-600F	6.00	12.00	30.00	16.0	33	40	3.50	0.005	0.020	0.040
LP33-700F	7.00	14.00	35.00	17.5	33	40	3.80	0.005	0.020	0.030
LP33-800F	8.00	16.00	40.00	18.8	33	40	4.00	0.005	0.020	0.020
LP33-900F	9.00	18.00	45.00	20.0	33	40	4.20	0.005	0.010	0.020

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.

Max.Time-to-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°C prior to tripping.

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

R_{1max}= Maximum resistance of device when measured one hour post trip at 25°C.

Thermal Derating Chart-I_H(A)

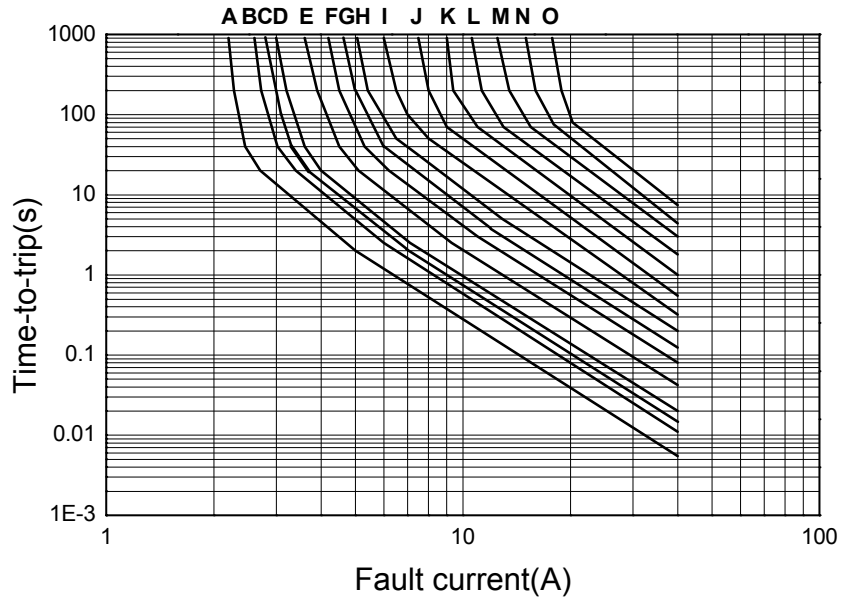
Part number	Maximum ambient operating temperatures(°C)									
	-40	-20	0	25	40	50	60	70	85	
LP33-090F	1.40	1.25	1.10	0.90	0.75	0.69	0.65	0.60	0.50	
LP33-110F	1.75	1.52	1.33	1.10	0.99	0.90	0.80	0.73	0.63	
LP33-120F	1.74	1.56	1.38	1.20	1.00	0.92	0.82	0.73	0.60	
LP33-135F	1.96	1.76	1.55	1.35	1.12	1.04	0.92	0.82	0.68	
LP33-160F	2.49	2.21	1.94	1.60	1.42	1.31	1.19	1.03	0.88	
LP33-185F	2.87	2.59	2.28	1.85	1.63	1.52	1.33	1.21	1.05	
LP33-190F	2.76	2.47	1.55	1.90	1.58	1.50	1.29	1.16	0.95	
LP33-250F	3.82	3.44	3.03	2.50	2.17	2.00	1.81	1.59	1.39	
LP33-300F	4.55	4.10	3.60	3.00	2.65	2.51	2.24	2.01	1.74	
LP33-400F	6.00	5.40	4.74	4.00	3.47	3.28	2.82	2.63	2.26	
LP33-500F	7.44	6.68	5.80	5.00	4.30	4.03	3.58	3.22	2.77	
LP33-600F	8.90	7.99	7.08	6.00	5.13	4.82	4.27	3.84	3.30	
LP33-700F	10.35	9.30	8.21	7.00	5.95	5.58	4.96	4.46	3.84	
LP33-800F	11.60	10.60	9.35	8.00	6.79	6.36	5.64	5.07	4.36	
LP33-900F	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} ≤ R ≤ R _{max}
Time to Trip	Specified current, V _{max} , 25°C	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} , 2hours	No arcing or burning

Typical Time-to-Trip Charts at 25°C

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



Package Information

Bulk:

LP33-090F~LP33-185F.....1000pcs per bag

LP33-250F~LP33-900F.....500pcs per bag

Tape & Reel:

LP33-090~LP33-160.....3000pcs per reel

LP33-185~LP33-900.....1500pcs per reel