

Features

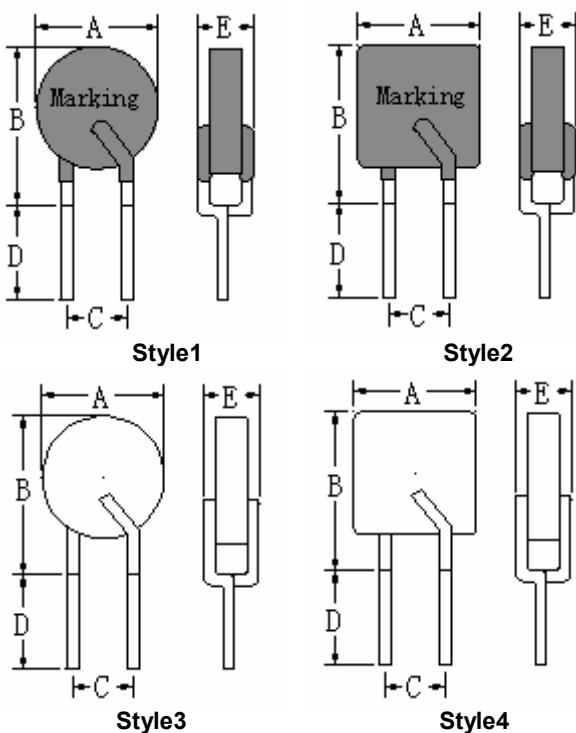
- Radial leaded devices
- High voltage surge capabilities
- UL94 V-0 insulating material
- Agency Recognition: UL、CSA、TUV
- Lead-free and compliant with the European Union RoHS Directive 2011/65/EU



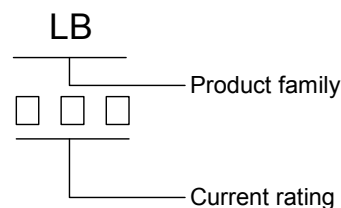
LB series

Product Dimensions

Part number	A		B		C		D		E		Lead	
	Max.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Style	Size(φ)		
LB030F	4.5	9.3	4.4	5.8	4.7	4.6	1	0.5				
LB050F	4.5	9.3	4.4	5.8	4.7	4.6	1	0.5				
LB080F	5.5	10.5	4.4	5.8	4.7	4.6	1	0.6				
LB080UF	5.0	10.0	4.4	5.8	4.7	3.8	3	0.6				
LB110F	6.5	11.0	4.4	5.8	4.7	4.6	1	0.6				
LB110UF	6.0	10.0	4.4	5.8	4.7	3.8	3	0.6				
LB120F	6.5	11.0	4.4	5.8	4.7	4.6	2	0.6				
LB120UF	6.0	10.0	4.4	5.8	4.7	3.8	4	0.6				
LB145F	6.5	11.0	4.4	5.8	4.7	4.6	2	0.6				
LB145UF	6.0	10.0	4.4	5.8	4.7	3.8	4	0.6				
LB180F	11.0	13.6	4.4	5.8	4.7	4.6	1	0.6				
LB180UF	10.0	12.5	4.4	5.8	4.7	3.8	3	0.6				



Marking system



*The suffix "U" means no outside envelop
 * Lead materials: Tin-plate metal wire.

Electrical Characteristics

Part number	I_H	I_T	Max. Time-to-trip		V_{max}	I_{max}	Pd_{typ}	R_{min}	R_{max}	R_{1max}
	(A)	(A)	Current(A)	Time(s)	(V)	(A)	(W)	(Ω)	(Ω)	(Ω)
LB030F	0.030	0.060	0.35	0.25	250	3	1.0	70.00	130.00	180.00
LB050F	0.050	0.100	1.00	0.25	250	3	1.0	30.00	60.00	100.00
LB080F	0.080	0.160	0.35	4.00	250	3	1.0	15.00	22.00	33.00
LB080UF	0.080	0.160	0.35	4.00	250	3	1.0	14.00	20.00	33.00
LB110F	0.110	0.220	1.00	0.80	250	3	1.0	7.00	15.00	20.00
LB110UF	0.110	0.220	1.00	0.80	250	3	1.0	8.00	14.00	20.00
LB120F	0.120	0.240	1.00	2.50	250	3	1.0	4.00	12.00	16.00
LB120UF	0.120	0.240	1.00	0.95	250	3	1.0	6.00	12.00	16.00
LB145F	0.145	0.290	1.00	2.50	250	3	1.0	3.00	7.50	14.00
LB145UF	0.145	0.290	1.00	2.00	250	3	1.0	3.50	6.50	14.00
LB180F	0.180	0.360	3.00	3.00	250	10	1.0	0.80	2.20	3.40
LB180UF	0.180	0.360	3.00	3.00	250	10	1.0	0.80	2.00	3.40

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 interrupt 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 device resistance measured one hour post-trip at 25°C.

Thermal Derating Chart- I_H (A)

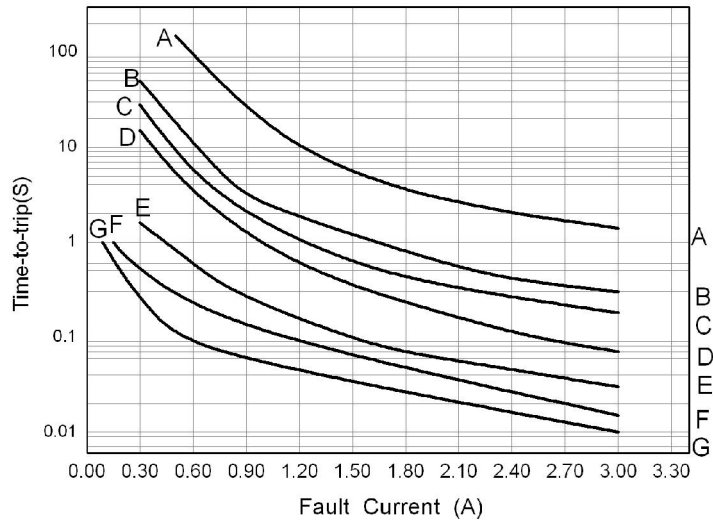
Part number	Maximum ambient operating temperatures(°C)								
	-40	-20	0	25	40	50	60	70	85
LB030F	0.053	0.047	0.037	0.030	0.039	0.025	0.016	0.019	0.013
LB050F	0.076	0.068	0.061	0.050	0.042	0.038	0.030	0.026	0.020
LB080F/LB080UF	0.124	0.110	0.095	0.080	0.066	0.059	0.051	0.044	0.033
LB110/FLB110UF	0.171	0.151	0.131	0.110	0.091	0.081	0.071	0.061	0.046
LB120F/LB120UF	0.191	0.170	0.148	0.120	0.104	0.093	0.082	0.071	0.055
LB145F/LB145UF	0.225	0.199	0.172	0.145	0.119	0.106	0.093	0.080	0.060
LB180F/LB180UF	0.269	0.240	0.211	0.180	0.153	0.138	0.123	0.109	0.087

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	$T \leq$ maximum Time to Trip
Hold Current	30min, at I_H	No trip
Trip Cycle Life	V_{max} , I_{max} , 20cycles	No arcing or burning
Trip Endurance	V_{max} , 1hours	No arcing or burning

Typical Time-to-trip Charts at 25°C

A=LB180F/180UF
 B=LB145F/145UF
 C=LB120F/120UF
 D=LB110F/110UF
 E=LB080F/080UF
 F=LB030F
 G=LB050F



Package Information

Bulk:

LB030F~LB180F1000pcs per bag
 LB080UF~ LB180UF.....1000pcs per bag

Tape & Reel:

LB030F~LB180F3000pcs per reel
 LB080UF~ LB180UF.....3000pcs per reel