

LB series

R-line Device

Features

- Radial leaded devices
- High voltage surge capabilities
- 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

- Customer Premise Equipment
- MDF modules
- Network Interface Devices
- Base station
- Power supply

Product Dimensions

Part number	A	B	C	D	E	Lead	
	Max	Max	Max	Min	Typ	Style	Size(ϕ)
LB080	5.8	9.9	4.6	4.7	5.1	1	0.6
LB080U	4.8	9.3	3.8	4.7	5.1	1	0.6
LB110	6.5	11.0	4.6	4.7	5.1	2	0.6
LB110U	6.0	10.0	3.8	4.7	5.1	2	0.6
LB120	6.5	11.0	4.6	4.7	5.1	2	0.6
LB120U	6.0	10.0	3.8	4.7	5.1	2	0.6
LB145	6.5	11.0	4.6	4.7	5.1	2	0.6
LB145U	6.0	10.0	3.8	4.7	5.1	2	0.6
LB180	11.0	13.6	4.6	4.7	5.1	2	0.6
LB180U	10.4	12.6	3.8	4.7	5.1	2	0.6

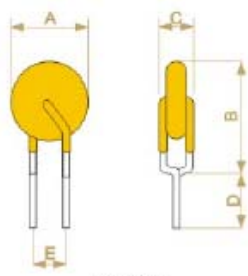


Figure1

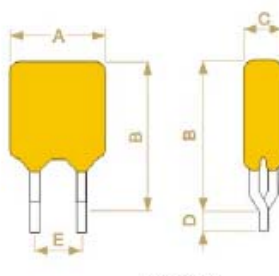
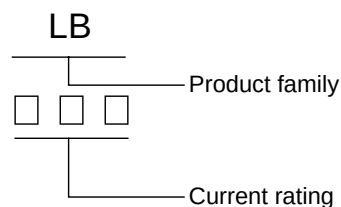


Figure2

Marking system



*The suffix "U" means no outside envelop

* Lead materials: Tin-plate metal wire.

Electrical Characteristics

Part number	I_H	I_T	T_{trip}		V_{max} interrupt	I_{max}	P_{dtyp}	R_{min}	R_{max}
	(A)	(A)	Current(A)	Time(S)	(V)	(A)	(W)	(Ω)	(Ω)
LB080	0.080	0.160	0.35	3.00*	250	3	1.0	15.00	22.00
LB080U	0.080	0.160	0.35	3.00*	250	3	1.0	14.00	20.00
LB110	0.110	0.220	1.00	0.80	250	3	1.0	7.00	15.00
LB110U	0.110	0.220	1.00	0.75	250	3	1.0	8.00	14.00
LB120	0.120	0.240	1.00	1.00	250	3	1.0	4.00	12.00
LB120U	0.120	0.240	1.00	0.95	250	3	1.0	6.00	12.00
LB145	0.145	0.290	1.00	2.50	250	3	1.0	3.00	7.50
LB145U	0.145	0.290	1.00	2.00	250	3	1.0	3.50	6.50
LB180	0.180	0.360	1.00	21.00	250	10	1.0	0.80	2.50
LB180U	0.180	0.360	1.00	15.00	250	10	1.0	0.80	2.00

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)

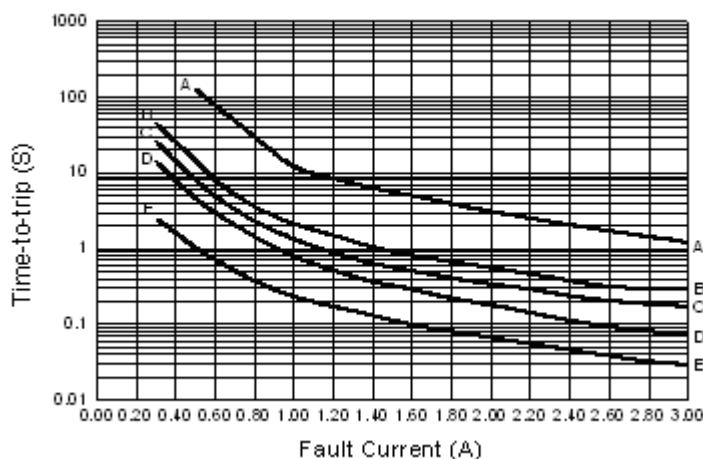
Part number	Maximum ambient operating temperatures(°C)								
	-40	-20	0	25	40	50	60	70	85
LB080/LB080U	0.124	0.110	0.095	0.080	0.066	0.059	0.051	0.044	0.033
LB110/LB110U	0.171	0.151	0.131	0.110	0.091	0.081	0.071	0.061	0.046
LB120/LB120U	0.191	0.170	0.148	0.120	0.104	0.093	0.082	0.071	0.055
LB145/LB145U	0.225	0.199	0.172	0.145	0.119	0.106	0.093	0.080	0.060
LB180/LB180U	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	$T \leq \text{maximum Time to Trip}$
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=LB180/180U
B=LB145/145U
C=LB120/120U
D=LB110/110U
E=LB080/080U



Package Information

Bulk:

LB080/LB080U~LB180/LB180U.....1000pcs per bag

Tape & Reel:

LB080/LB080U~LB180/LB180U.....3000pcs 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.