

## LBN series

## R-line Device

## Features

- Radial leaded devices, higher rated voltage up to 130V
- 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
- UL、TUV is pending
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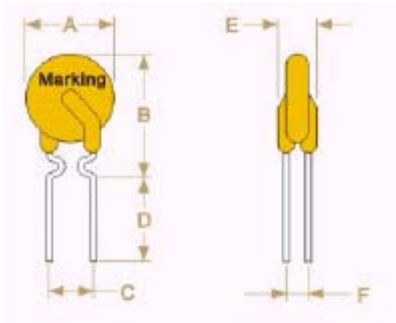


## Applications

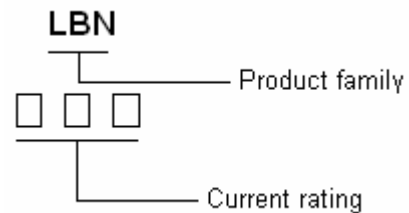
- Customer Premise Equipment
- MDF modules
- Network Interface Devices
- Base station
- Power supply

## Product Dimensions

Part number	A	B	C	D	E	F	Lead	
	Max.	Max.	Typ.	Min.	Max.	Typ.	Style	Size( $\phi$ )
LBN 100	5.5	10.2	5.1	7.6	3.1	1.1	1	0.6
LBN 150	6.0	11.4	5.1	7.6	3.1	1.1	1	0.6
LBN 200	6.5	11.6	5.1	7.6	3.1	1.1	1	0.6
LBN 250	7.8	12.5	5.1	7.6	3.1	1.1	1	0.6
LBN 300	8.5	12.5	5.1	7.6	3.1	1.1	1	0.6
LBN 350	8.7	13.0	5.1	7.6	3.1	1.1	1	0.6
LBN 400	9.5	14.5	5.1	7.6	3.1	1.1	1	0.6
LBN 500	10.3	16.5	5.1	7.6	3.1	1.1	1	0.6
LBN 650	12.0	17.5	5.1	7.6	3.1	1.1	1	0.6
LBN 800	14.0	17.6	5.1	7.6	3.1	1.4	1	0.6
LBN 1100	13.9	19.7	5.1	7.6	3.1	1.4	1	0.6
LBN 1350	16.1	21.9	5.1	7.6	3.1	1.4	1	0.6



## Marking system



\*The suffix "U" means no outside envelop

\* Lead materials: Tin-plate metal wire.

## Electrical Characteristics

Part number	$I_H$	$I_T$	$T_{trip}$	$V_{max}$	$I_{max}$	$R_{min}$	$R_{max}$
	(A)	(A)	(S)	(V)	(A)	( $\Omega$ )	( $\Omega$ )
LBN 100	0.10	0.2	3.6	130	40	5.6	10.0
LBN 150	0.15	0.30	3.2	130	40	2.30	6.50
LBN 200	0.20	0.40	3.0	130	40	1.70	3.40
LBN 250	0.25	0.50	8.0	130	40	1.25	1.65
LBN 300	0.30	0.60	5.8	130	40	0.90	1.55
LBN 350	0.35	0.70	7.0	130	40	0.85	1.20
LBN 400	0.40	0.80	5.0	130	40	0.72	1.25
LBN 500	0.50	1.00	5.3	130	40	0.55	0.85
LBN 650	0.65	1.30	6.5	130	40	0.40	0.65
LBN 800	0.80	1.60	7.0	130	40	0.30	0.59
LBN 1100	1.10	2.20	7.3	130	40	0.15	0.50
LBN 1350	1.35	2.70	7.5	130	40	0.11	0.38

$I_H$ =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.

$V_{max\ interrupt}$ =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.

$P_{dtyp}$ =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)

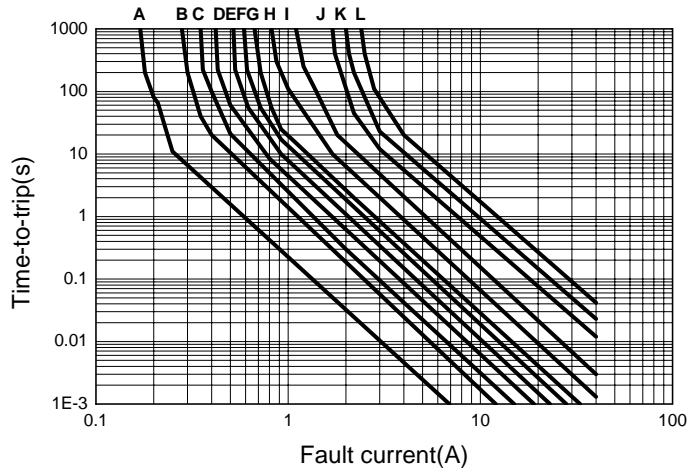
Part number	Maximum ambient operating temperatures(°C)								
	-40	-20	0	25	40	50	60	70	85
LBN 100	0.23	0.19	0.15	0.10	0.08	0.06	0.05	0.04	0.02
LBN 150	0.28	0.24	0.20	0.15	0.13	0.11	0.09	0.07	0.05
LBN 200	0.33	0.29	0.25	0.20	0.18	0.16	0.14	0.12	0.10
LBN 250	0.38	0.34	0.30	0.25	0.22	0.20	0.18	0.16	0.14
LBN 300	0.43	0.39	0.35	0.30	0.27	0.25	0.23	0.21	0.18
LBN 350	0.48	0.44	0.40	0.35	0.32	0.30	0.28	0.26	0.23
LBN 400	0.53	0.49	0.45	0.40	0.37	0.35	0.33	0.31	0.28
LBN 500	0.63	0.59	0.55	0.50	0.47	0.45	0.43	0.41	0.38
LBN 650	0.78	0.74	0.70	0.65	0.62	0.60	0.58	0.56	0.53
LBN 800	0.93	0.89	0.85	0.80	0.77	0.75	0.73	0.71	0.68
LBN 1100	1.23	1.19	1.15	1.10	1.07	1.05	1.03	1.01	0.98
LBN 1350	1.48	1.44	1.40	1.35	1.32	1.30	1.28	1.26	1.23

## 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	$V_{max}$ , $I_{max}$ , 100cycles	No arcing or burning
Trip Endurance	$V_{max}$ , 24hours	No arcing or burning

## Typical Time-to-trip Charts at 25°C

- A= LBN100
- B= LBN150
- C= LBN200
- D= LBN250
- E= LBN300
- F= LBN350
- G= LBN400
- H= LBN500
- I = LBN650
- J = LBN800
- K= LBN1100
- L= LBN1350



## 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.