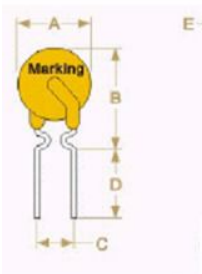
Features

- 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
- Recognition: UL, CSA, TUV is pending

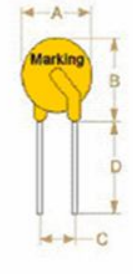
LBN *series* — *R-line Device*

Product Dimensions

Part number	A	B	C	D	E	Lead	
	Max.	Max.	Typ.	Min.	Max.	Style	Size(Φ)
LBN 050F	6.9	9.9	5.1	7.6	4.6	2	0.5
LBN 080F	7.2	10.2	5.1	7.6	4.6	2	0.5
LBN 100F	5.5	10.2	5.1	7.6	3.1	1	0.6
LBN 120F	8.3	10.7	5.1	7.6	3.8	2	0.5
LBN 150F	6.0	11.4	5.1	7.6	3.1	1	0.6
LBN 160F	9.9	12.5	5.1	7.6	3.8	2	0.5
LBN 170F	7.9	13.0	5.1	7.6	3.8	1	0.5
LBN 200F	6.5	11.6	5.1	7.6	3.1	1	0.6
LBN 250F	7.8	12.5	5.1	7.6	3.1	1	0.6
LBN 300F	7.8	12.5	5.1	7.6	3.1	1	0.6
LBN 330F	11.4	16.5	5.1	7.6	3.8	2	0.6
LBN 350F	8.7	13.0	5.1	7.6	3.1	1	0.6
LBN 400F	9.5	14.5	5.1	7.6	3.1	1	0.6
LBN 500F	10.3	16.5	5.1	7.6	3.1	1	0.6
LBN 550F	14.0	21.7	5.1	7.6	4.1	3	0.8
LBN 650F	12.0	17.5	5.1	7.6	3.1	1	0.6
LBN 700F	10.6	15.5	5.1	7.6	3.8	1	0.6
LBN 750F	10.9	17.0	5.1	7.6	4.1	3	0.8
LBN 800F	12.5	17.6	5.1	7.6	3.1	1	0.6
LBN 900F	11.9	15.9	5.1	7.6	3.8	1	0.6
LBN 1000F	11.5	20.1	5.1	7.6	4.1	3	0.8
LBN 1100F	13.9	19.7	5.1	7.6	3.1	1	0.6
LBN 1250F	13.9	19.7	5.1	7.6	4.1	3	0.8
LBN 1300F	15.5	20.6	5.1	7.6	4.1	2	0.8
LBN 1350F	16.1	21.9	5.1	7.6	3.1	1	0.6
LBN 1600F	17.5	22.5	5.1	7.6	4.1	2	0.8
LBN 1850F	19.9	24.9	5.1	7.6	4.1	2	0.8
LBN 2000F	22.5	31.8	10.2	7.6	4.1	3	0.8
LBN 2500F	22.5	27.5	10.2	7.6	4.1	2	0.8
LBN 3000F	25.5	30.0	10.2	7.6	4.1	2	0.8
LBN 3750F	29.5	34.0	10.2	7.6	4.1	2	0.8



Style1



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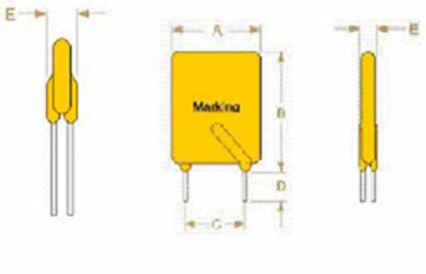
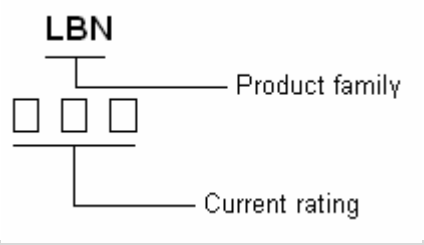


Style3

CYG Wayon Circuit protection Co., Ltd. Tel: 86-21- 50310888 50968308 Fax: 86-21-50757680
No. 1001, Shiwan Qi Road, Pudong Area, Shanghai E-mail: market@way-on.com Http://www.way-on.com

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	I_T	Max.Time-to-trip		V_{max}	I_{max}	R_{min}	R_{max}	R_{1max}
	(A)	(A)	(A)	(S)	(V)	(A)	(Ω)	(Ω)	(Ω)
LBN 050F	0.05	0.12	0.25	10.0	135	1.0	18.50	31.00	65.00
LBN 080F	0.08	0.19	0.40	10.0	135	1.2	7.40	12.00	26.00
LBN 100F	0.10	0.20	0.50	3.6	135	2.0	5.60	10.00	20.10
LBN 120F	0.12	0.30	0.60	15.0	135	1.2	3.00	6.50	12.00
LBN 150F	0.15	0.30	0.75	3.2	135	2.0	2.30	6.50	10.70
LBN 160F	0.16	0.37	0.80	15.0	135	2.0	2.50	4.10	7.80
LBN 170F	0.17	0.34	0.85	10.0	135	2.0	2.00	7.00	10.80
LBN 200F	0.20	0.40	1.00	3.0	135	2.0	1.70	3.40	6.10
LBN 250F	0.25	0.50	1.25	8.0	135	3.0	1.25	1.65	3.45
LBN 300F	0.30	0.60	1.50	5.8	135	3.0	0.90	1.55	2.95
LBN 330F	0.33	0.74	1.65	21.0	135	4.5	0.77	1.24	2.60
LBN 350F	0.35	0.70	1.75	7.0	135	3.0	0.85	1.20	2.45
LBN 400F	0.40	0.80	2.00	5.0	135	3.0	0.72	1.25	2.36
LBN 500F	0.50	1.00	2.50	5.3	135	3.0	0.55	0.85	1.68
LBN 550F	0.55	1.25	2.75	26.0	135	7.0	0.45	0.73	1.45
LBN 650F	0.65	1.30	3.25	6.5	135	5.0	0.40	0.65	1.26
LBN 700F	0.75	1.50	3.75	6.3	135	5.0	0.25	0.60	1.05
LBN 750F	0.75	1.50	3.75	14.0	135	7.5	0.25	0.40	0.69
LBN 800F	0.80	1.60	4.00	7.0	135	5.0	0.30	0.59	0.93
LBN 900F	0.90	1.80	4.50	7.2	135	5.0	0.20	0.47	0.70
LBN 1000F	1.00	2.00	5.00	13.6	135	10.0	0.18	0.27	0.47
LBN 1100F	1.10	2.20	5.50	7.3	135	8.0	0.15	0.50	0.68
LBN 1250F	1.25	2.50	6.25	18.0	135	12.5	0.12	0.18	0.32
LBN 1300F	1.35	2.70	6.75	9.6	135	10.0	0.12	0.30	0.44
LBN 1350F	1.35	2.70	6.75	7.5	135	13.5	0.11	0.38	0.52
LBN 1600F	1.60	3.20	8.00	11.4	135	12.0	0.09	0.22	0.33
LBN 1850F	1.85	3.70	9.25	12.6	135	12.0	0.08	0.19	0.29
LBN 2000F	2.00	4.20	10.00	36.0	135	20.0	0.08	0.12	0.21
LBN 2500F	2.50	5.00	12.50	15.6	135	15.0	0.05	0.13	0.19
LBN 3000F	3.00	6.00	15.00	19.8	135	17.0	0.04	0.10	0.15
LBN 3750F	3.75	7.50	18.75	24.0	135	20.0	0.03	0.08	0.12

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.

$V_{max\ interrupt}$=Maximum interrupt voltage device can withstand without damage at rated current.

I_{max}=Maximum fault current device can withstand without damage at rated voltage.

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℃ prior to tripping.

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

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

Thermal Derating Chart-Ih (A)

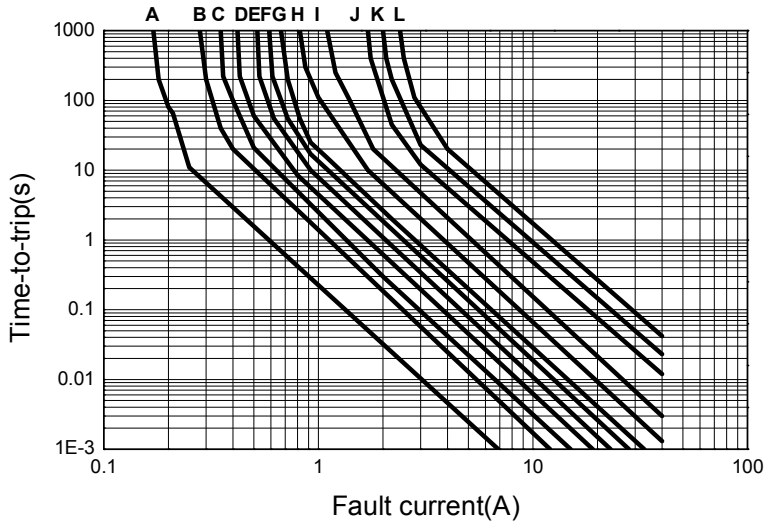
Part number	Maximum ambient operating temperatures(℃)								
	-40	-20	0	25	40	50	60	70	85
LBN 050F	0.08	0.07	0.06	0.05	0.04	0.03	0.03	0.02	0.02
LBN 080F	0.13	0.12	0.10	0.08	0.06	0.05	0.05	0.04	0.03
LBN 100F	0.23	0.19	0.15	0.10	0.08	0.06	0.05	0.04	0.02
LBN 120F	0.25	0.18	0.15	0.12	0.10	0.09	0.07	0.06	0.04
LBN 150F	0.28	0.24	0.20	0.15	0.13	0.11	0.09	0.07	0.05
LBN 160F	0.30	0.25	0.21	0.16	0.14	0.12	0.10	0.08	0.06
LBN 170F	0.31	0.26	0.22	0.17	0.15	0.13	0.11	0.09	0.07
LBN 200F	0.33	0.29	0.25	0.20	0.18	0.16	0.14	0.12	0.10
LBN 250F	0.38	0.34	0.30	0.25	0.22	0.20	0.18	0.16	0.14
LBN 300F	0.43	0.39	0.35	0.30	0.27	0.25	0.23	0.21	0.18
LBN 330F	0.58	0.50	0.42	0.33	0.27	0.23	0.20	0.17	0.11
LBN 350F	0.48	0.44	0.40	0.35	0.32	0.30	0.28	0.26	0.23
LBN 400F	0.53	0.49	0.45	0.40	0.37	0.35	0.33	0.31	0.28
LBN 500F	0.63	0.59	0.55	0.50	0.47	0.45	0.43	0.41	0.38
LBN 550F	0.91	0.80	0.69	0.55	0.45	0.39	0.34	0.28	0.21
LBN 650F	0.78	0.74	0.70	0.65	0.62	0.60	0.58	0.56	0.53
LBN 700F	1.42	1.21	0.96	0.75	0.63	0.56	0.50	0.43	0.34
LBN 750F	1.45	1.24	0.99	0.75	0.65	0.58	0.52	0.45	0.36
LBN 800F	0.93	0.89	0.85	0.80	0.77	0.75	0.73	0.71	0.68
LBN 900F	1.48	1.23	1.12	0.90	0.72	0.64	0.56	0.50	0.37
LBN 1000F	1.60	1.42	1.23	1.00	0.78	0.69	0.61	0.54	0.42
LBN 1100F	1.23	1.19	1.15	1.10	1.07	1.05	1.03	1.01	0.98
LBN 1250F	2.03	1.81	1.58	1.25	1.08	0.98	0.86	0.75	0.63
LBN 1300F	2.06	1.84	1.62	1.30	1.11	1.00	0.89	0.77	0.64
LBN 1350F	1.48	1.44	1.40	1.35	1.32	1.30	1.28	1.26	1.23
LBN 1600F	2.34	2.12	1.91	1.60	1.40	1.29	1.19	1.08	0.94
LBN 1850F	2.60	2.38	2.16	1.85	1.56	1.46	1.34	1.23	1.09
LBN 2000F	2.76	2.54	2.32	2.00	1.71	1.60	1.49	1.39	1.25
LBN 2500F	3.27	3.05	2.83	2.50	2.22	2.11	1.99	1.87	1.73
LBN 3000F	3.75	3.53	3.32	3.00	2.69	2.58	2.49	2.38	2.24
LBN 3750F	4.51	4.29	4.07	3.75	3.45	3.34	3.24	3.12	2.98

Test Procedures And Requirements

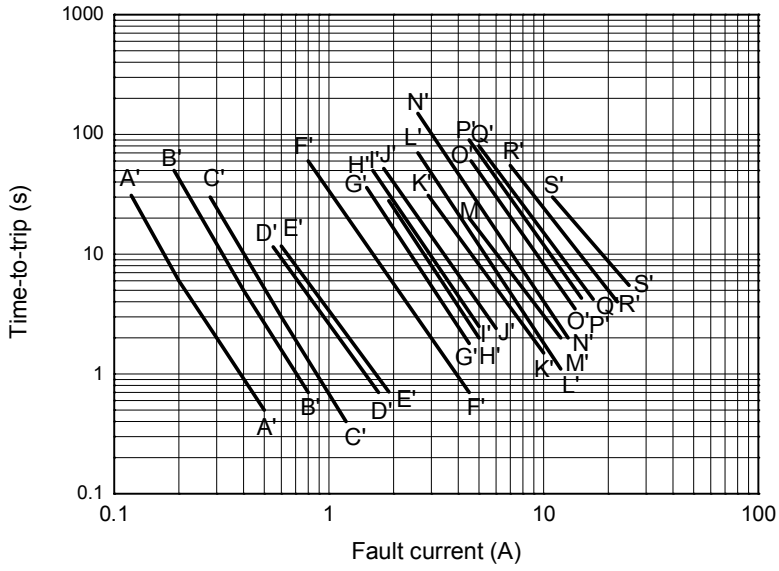
Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @ 25℃	$R_{min} \leqslant R \leqslant R_{max}$
Time to Trip	Specified current, V_{max}, 25℃	T≤maximum Time to Trip
Hold Current	30min, at I_H	No trip
Trip Cycle Life	V_{max}, I_{max}, 100cycles	No arcing or burning
Trip Endurance	V_{max}, 24hours	No arcing or burning

Typical Time-to-trip Charts at 25℃

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



A'=LBN050
B'=LBN080
C'=LBN120
D'=LBN160
E'=LBN170
F'=LBN330
G'=LBN550
H'=LBN700
I'=LBN750
J'=LBN900
K'=LBN1000
L'=LBN1250
M'=LBN1300
N'=LBN1600
O'=LBN1850
P'=LBN2000
Q'=LBN2500
R'=LBN3000
S'=LBN3750



Package Information

Bulk:

LBN100F~LBN1350F…….. ……1000pcs per bag

LBN1600~LBN3750F…….. ……500pcs per bag

Tape & Reel:

LBN100F~LBN1350F……..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.