

## Features



- Radial leaded devices
- Cured, flame retardant epoxy polymer insulating material meets UL94 V-0 requirements
- Available in lead-free version
- Agency Recognition: UL、CSA、TUV

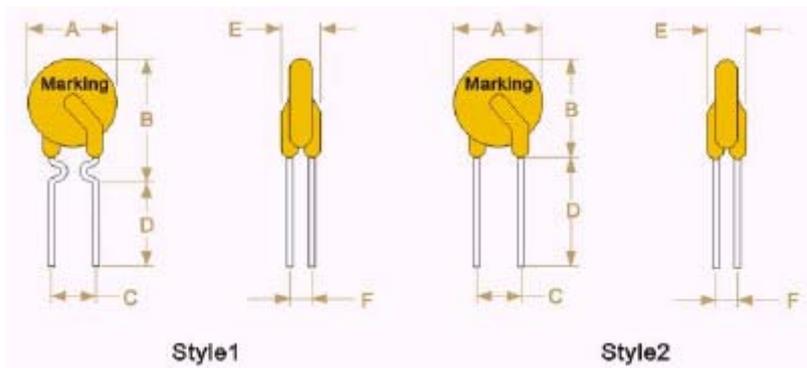


LP60 series

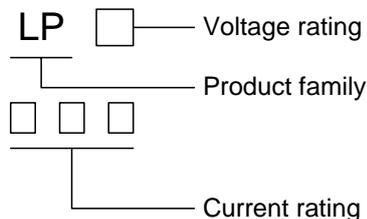
R-line devices

## Product Dimensions

Part number	A	B	C	D	E	F	Lead	
	Max.	Max.	Typ.	Min.	Max.	Typ.	Style	Size(φ)
LP60-005F	5.7	10.5	5.1	7.6	3.1	1.1	1	0.6
LP60-010F	5.7	10.9	5.1	7.6	3.1	1.1	1	0.6
LP60-017F	5.8	11.1	5.1	7.6	3.1	1.1	1	0.6
LP60-020F	5.9	11.2	5.1	7.6	3.1	1.1	1	0.6
LP60-025F	6.1	11.4	5.1	7.6	3.1	1.1	1	0.6
LP60-030F	7.6	13.4	5.1	7.6	3.1	1.1	1	0.6
LP60-040F	7.7	13.6	5.1	7.6	3.1	1.1	1	0.6
LP60-050F	7.9	13.7	5.1	7.6	3.1	1.1	1	0.6
LP60-065F	9.7	14.5	5.1	7.6	3.1	1.1	1	0.6
LP60-075F	10.7	15.5	5.1	7.6	3.1	1.1	1	0.6
LP60-090F	11.7	16.5	5.1	7.6	3.1	1.1	1	0.6
LP60-110F	13.0	16.7	5.1	7.6	3.1	1.4	2	0.8
LP60-135F	15.7	17.6	5.1	7.6	3.1	1.4	2	0.8
LP60-160F	16.7	19.7	5.1	7.6	3.1	1.4	2	0.8
LP60-185F	17.8	22.9	5.1	7.6	3.1	1.4	2	0.8
LP60-250F	21.3	23.5	10.2	7.6	3.1	1.4	2	0.8
LP60-300F	24.9	27.4	10.2	7.6	3.1	1.4	2	0.8
LP60-375F	28.5	32.5	10.2	7.6	3.1	1.4	2	0.8



## 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 <sub>H</sub> (A)	I <sub>T</sub> (A)	T <sub>trip</sub> (S)	V <sub>max</sub> (V)	I <sub>max</sub> (A)	Pd <sub>typ</sub> (W)	R <sub>min</sub> (Ω)	R <sub>max</sub> (Ω)
LP60-005F	0.05	0.10	5.0	60	40	0.26	7.30	11.10
LP60-010F	0.10	0.20	8.0	60	40	0.51	2.50	4.50
LP60-017F	0.17	0.34	5.0	60	40	0.60	2.00	3.20
LP60-020F	0.20	0.40	3.6	60	40	0.52	1.50	2.84
LP60-025F	0.25	0.50	3.2	60	40	0.52	1.00	1.95
LP60-030F	0.30	0.60	3.0	60	40	0.59	0.76	1.36
LP60-040F	0.40	0.80	3.8	60	40	0.66	0.52	0.86
LP60-050F	0.50	1.00	4.0	60	40	0.80	0.41	0.77
LP60-065F	0.65	1.30	5.3	60	40	0.90	0.27	0.48
LP60-075F	0.75	1.50	6.3	60	40	0.95	0.18	0.40
LP60-090F	0.90	1.80	7.2	60	40	1.00	0.14	0.31
LP60-110F	1.10	2.20	8.2	60	40	1.51	0.14	0.25
LP60-135F	1.35	2.70	9.6	60	40	1.71	0.12	0.19
LP60-160F	1.60	3.20	11.4	60	40	1.98	0.09	0.14
LP60-185F	1.85	3.70	12.6	60	40	2.10	0.08	0.12
LP60-250F	2.50	5.00	15.6	60	40	2.50	0.05	0.08
LP60-300F	3.00	6.00	19.8	60	40	2.80	0.04	0.06
LP60-375F	3.75	7.50	24.0	60	40	3.20	0.03	0.05

I<sub>H</sub>=Hold current: maximum current at which the device will not trip at 25°C still air.

I<sub>T</sub>=Trip current: minimum current at which the device will always trip at 25°C still air.

V<sub>max</sub>=Maximum voltage device can withstand without damage at rated current.

I<sub>max</sub>=Maximum fault current device can withstand without damage at rated voltage.

T<sub>trip</sub>=Maximum time to trip(s) at assigned current.

Pd<sub>typ</sub>=Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

R<sub>min</sub>=Minimum device resistance at 25°C prior to tripping.

R<sub>max</sub>=Maximum device resistance at 25°C prior to tripping.

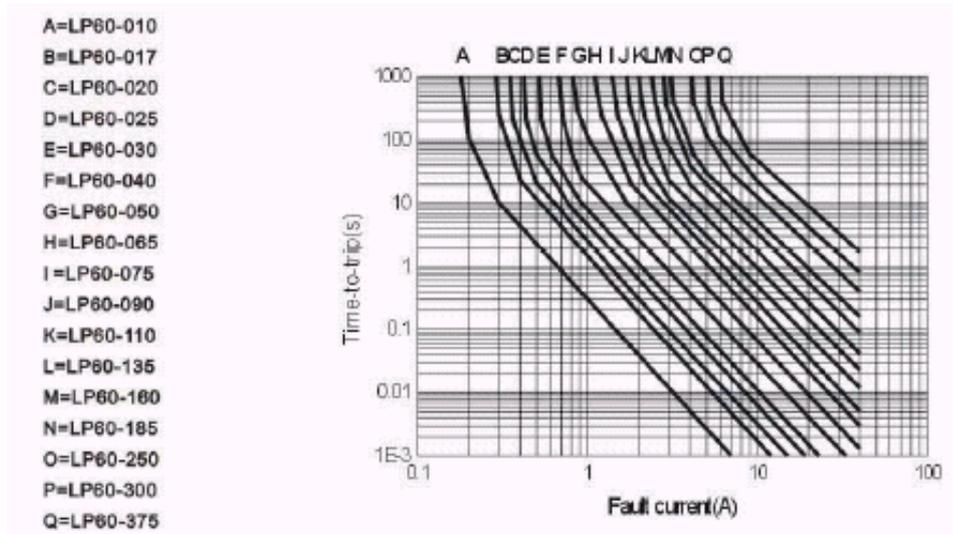
## Thermal Derating Chart-I<sub>H</sub>(A)

Part number	Maximum ambient operating temperatures(°C)								
	-40	-20	0	25	40	50	60	70	85
LP60-005F	0.077	0.069	0.061	0.050	0.044	0.040	0.036	0.032	0.025
LP60-010F	0.18	0.15	0.13	0.10	0.08	0.07	0.06	0.05	0.03
LP60-017F	0.28	0.24	0.20	0.17	0.14	0.12	0.10	0.09	0.06
LP60-020F	0.34	0.29	0.25	0.20	0.16	0.14	0.13	0.10	0.07
LP60-025F	0.42	0.36	0.31	0.25	0.20	0.18	0.16	0.12	0.09
LP60-030F	0.52	0.44	0.38	0.30	0.24	0.22	0.18	0.14	0.10
LP60-040F	0.66	0.57	0.50	0.40	0.32	0.29	0.24	0.20	0.14
LP60-050F	0.83	0.74	0.63	0.50	0.41	0.36	0.30	0.25	0.18
LP60-065F	1.10	0.95	0.82	0.65	0.53	0.47	0.40	0.33	0.24
LP60-075F	1.26	1.11	0.95	0.75	0.61	0.54	0.45	0.39	0.28
LP60-090F	1.52	1.30	1.15	0.90	0.73	0.65	0.55	0.47	0.33
LP60-110F	1.82	1.60	1.35	1.10	0.89	0.79	0.65	0.55	0.40
LP60-135F	2.20	1.91	1.65	1.35	1.09	0.96	0.80	0.68	0.50
LP60-160F	2.60	2.30	1.95	1.60	1.30	1.13	1.00	0.80	0.60
LP60-185F	3.00	2.63	2.30	1.85	1.50	1.33	1.12	0.92	0.67
LP60-250F	4.05	3.58	3.02	2.50	2.02	1.80	1.55	1.30	0.90
LP60-300F	4.82	4.16	3.62	3.00	2.43	2.16	1.85	1.50	1.09
LP60-375F	6.02	5.19	4.50	3.75	3.02	2.68	2.30	1.95	1.39

## 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



## Package Information

Bulk:

LP60-005F~LP60-065F.....1000pcs per bag  
 LP60-075F~LP60-135F.....500pcs per bag  
 LP60-160F~LP60-375F.....1000pcs per bag

Tape & Reel:

LP60-005F~LP60-090F.....3000pcs per reel  
 LP60-110F~LP60-160F.....1500pcs per reel  
 LP60-185F~LP60-375F.....1000pcs per reel