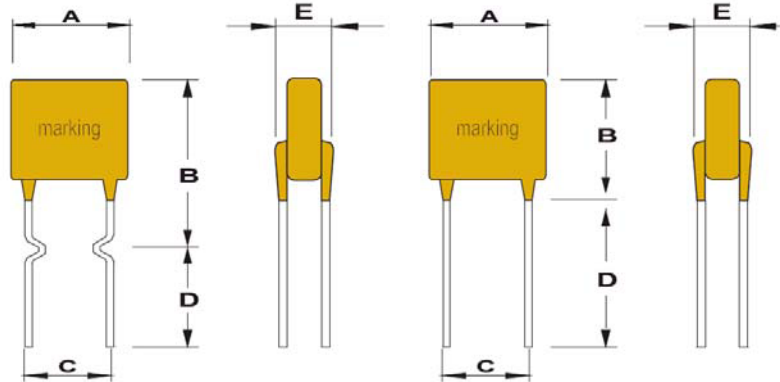


# PPTC RESETTABLE FUSE

# Radial Leaded-RDL 30V Series

## Construction and Dimension:



**Style1**

**Style2**

Unit:mm

Model	A Max.	B Max.	C		D Min.	E Max.	Physical characteristics		
			Nom.	Tol.±			Style	Lead	Material
RDL60V090	7.4	12.2	5.1	0.7	7.6	3.0	1	0.51 dia.	Sn/CuFe
RDL60V110	7.4	14.2	5.1	0.7	7.6	3.0	1	0.51 dia.	Sn/CuFe
RDL60V135	8.9	13.5	5.1	0.7	7.6	3.0	1	0.51 dia.	Sn/CuFe
RDL60V160	8.9	15.2	5.1	0.7	7.6	3.0	1	0.51 dia.	Sn/CuFe
RDL60V185	10.2	15.7	5.1	0.7	7.6	3.0	1	0.51 dia.	Sn/CuFe
RDL60V250	11.4	18.3	5.1	0.7	7.6	3.0	1	0.51 dia.	Sn/CuFe
RDL60V300	11.4	17.3	5.1	0.7	7.6	3.0	2	0.81 dia.	Sn/Cu
RDL60V400	14.0	20.1	5.1	0.7	7.6	3.0	2	0.81 dia.	Sn/Cu
RDL60V500	14.0	24.9	5.1	0.7	7.6	3.0	2	0.81 dia.	Sn/Cu
RDL60V600	16.5	24.9	5.1	0.7	7.6	3.0	2	0.81 dia.	Sn/Cu
RDL60V700	19.1	26.7	5.1	0.7	7.6	3.0	2	0.81 dia.	Sn/Cu
RDL60V800	21.6	29.2	5.1	0.7	7.6	3.0	2	0.81 dia.	Sn/Cu
RDL60V900	24.1	29.7	5.1	0.7	7.6	3.0	2	0.81 dia.	Sn/Cu

\*Models for style 2 are provided for customer request.

## Electrical Characteristics at 23°C :

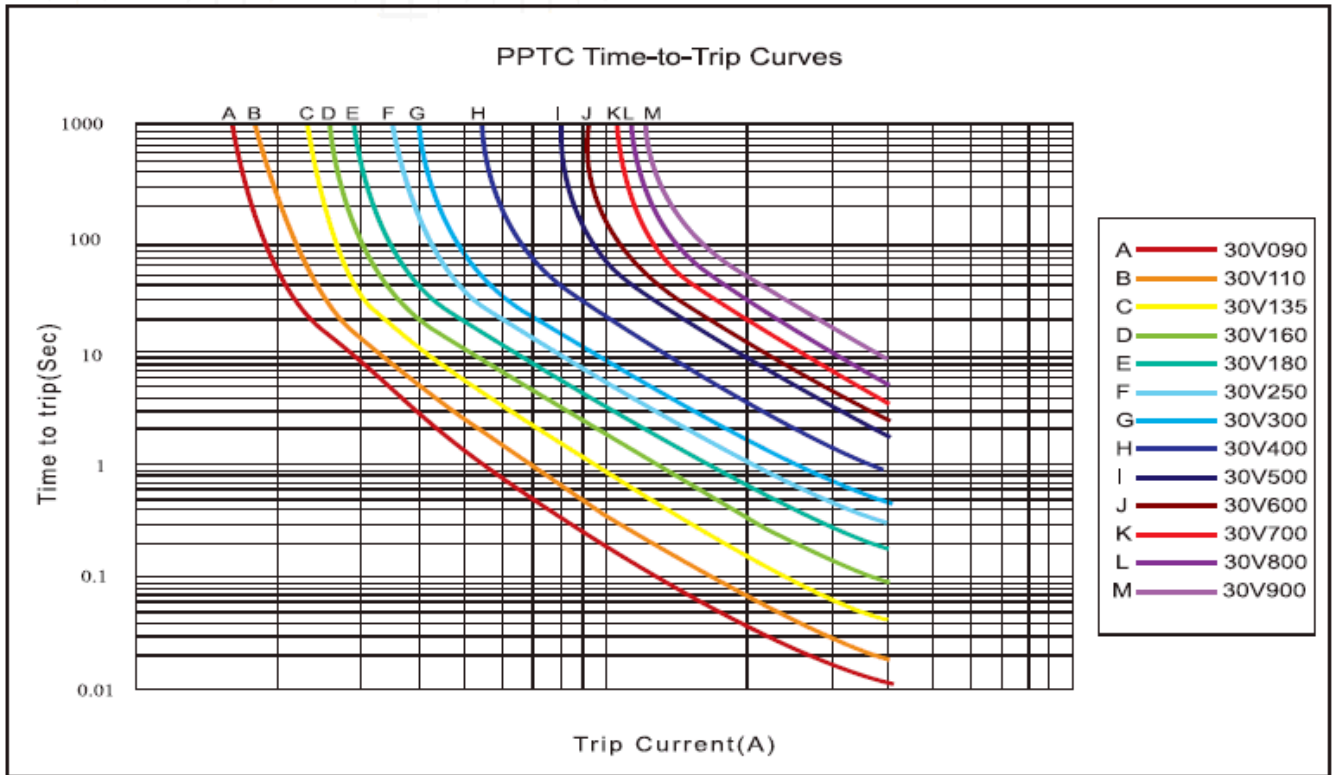
Model	V Max. (Volts)	I Max. (Amps)	I hold (Amps)	I trip (Amps)	R min (Ω)	R (Ω)	R1 max (Ω)	P(d) (Ω)
RDL60V090	30	40	0.09	1.80	0.07	0.12	0.27	0.60
RDL60V110	30	40	1.10	2.20	.05	0.10	0.22	0.70
RDL60V135	30	40	1.35	2.70	0.04	0.08	0.17	0.80
RDL60V160	30	40	1.60	3.20	0.03	0.07	0.15	0.90
RDL60V185	30	40	1.85	3.70	0.03	0.06	0.11	1.00
RDL60V250	30	40	2.50	5.00	0.02	0.05	0.08	1.20
RDL60V300	30	40	3.00	6.00	0.02	0.05	0.08	2.00
RDL60V400	30	40	4.00	8.00	0.01	0.03	0.05	2.50
RDL60V500	30	40	5.00	10.00	0.01	0.03	0.05	3.00
RDL60V600	30	40	6.00	12.00	0.005	0.02	0.04	3.50
RDL60V700	30	40	7.00	14.00	0.005	0.02	0.03	3.80
RDL60V800	30	40	8.00	16.00	0.005	0.02	0.03	4.00
RDL60V900	30	40	9.00	18.00	0.005	0.01	0.02	4.20

# PPTC RESETTABLE FUSE

# Radial Leaded-RDL 30V Series

## Construction and Dimension:

### Typical Time to Trip Curves at 23°C:



## Thermal Derating Chart

Unit:Amps

TEMP(C <sup>0</sup> )	-40	-20	0	23	40	50	60	70	85
RDL60V090	1.40	1.25	1.15	0.90	0.75	0.65	0.57	0.50	0.35
RDL60V110	1.60	1.45	1.30	1.10	0.95	0.85	0.75	0.70	0.55
RDL60V135	2.00	1.85	1.60	1.354	1.15	1.05	0.95	0.85	0.70
RDL60V160	2.35	2.15	1.90	1.60	1.35	1.25	1.10	1.00	0.85
RDL60V185	2.5	2.50	2.20	1.85	1.60	1.45	1.25	1.15	0.95
RDL60V250	3.75	3.30	2.95	2.50	2.00	1.95	1.75	1.50	1.30
RDL60V300	4.50	3.95	3.50	3.00	2.55	2.35	2.05	1.85	1.55
RDL60V400	5.90	5.30	4.70	4.00	3.40	3.15	2.75	2.40	2.00
RDL60V500	7.35	6.60	5.85	5.00	4.25	3.90	3.55	3.25	2.80
RDL60V600	8.80	7.90	6.90	6.00	4.80	4.50	4.00	3.55	3.00
RDL60V700	10.5	9.10	8.00	7.00	5.70	5.20	4.55	4.15	3.50
RDL60V800	11.5	10.5	9.25	8.00	6.50	6.00	5.35	4.70	4.05
RDL60V900	14.0	11.9	10.5	9.00	7.30	6.75	6.00	5.20	4.45

## PPTC RESETTABLE FUSE

### Definition of Electrical Characteristics

- $V_{max}$  : Maximum voltage the device can withand without damage at rated current.
- $I_{max}$  : Maximum fault current the device can withand without damage at rated voltage.
- $I_{hold}$  : Hold current; Maximum current at which the device will not trip in 23°C still air.
- $I_{trip}$  : Trip current; Minimum current at which the device will trip in 23°C still air.
- $R_{min}$  : Minimum device resistance in initial state at 23°C.
- $R_{max}$  : Maximum device resistance in initial state at 23°C.
- $R_{1max}$  : Maximum device resistance at 23°C measured 1 hours after tripping.
- $P(d)$  : Maximum power dissipated from device when in the tripped state in 23°C still air.

### Test and Environmental Characteristics

Items	Specification/Condition	Accept Criteria
Initial resistance	In still air at 23°C	$R_{min} \leq R \leq R_{max}$
Time to trip	At specified current, $V_{max}$ at 23°C	Refer to time-to-trip chart
Hold current	30 min., at $I_{hold}$	No trip
Trip endurance	$V_{max}$ , $I_{max}$ , 100 cycles	No arcing or burning
Trip aging	$V_{max}$ , 48 hours	No arcing or burning
Max.device surface temp.	In tripped state	125°C max.
Passive aging	85°C, 1000 hours	± 10% typical resistance change
Humidity aging	85°C, 85% RH, 1000 hours	± 10% typical resistance change
Thermal shock	85°C/-40°C, 10 times	+5 ~ -20% typical resistance change

### Product Packing Specifications

Type	Series	Model	Packaging type	Quantity	
Radial-led type	RDL06V	090 ~ 110	Reel packaging Ammo packaging	3000 / pack	
		RDL30V		135 ~ 185	2000 / pack
				250 ~ 400	1500 / pack
	RDL60V	010 ~ 050		3000 / pack	
		065 ~ 075		2000 / pack	
		090 ~ 185		1500 / pack	
SMD type	2920SMD	All models	Reel Packaging	2000 / pack	
	1812SMD			1500 / pack	
	1206SMD			3000 / pack	
	0805SMD			3000 / pack	

\* Basic Packaging unit for radial-led type and strap type is 500 pcs/bag.

Radial-Leaded Type Part Number:

- (1) RDL = Radial Led Type.
- (2) 06V = Product Series Defined by max voltage ( $V_{max}$ ) 06V, 16V, 30V, 60V.
- (3) 010 = Hold Current  $I_{hold}$