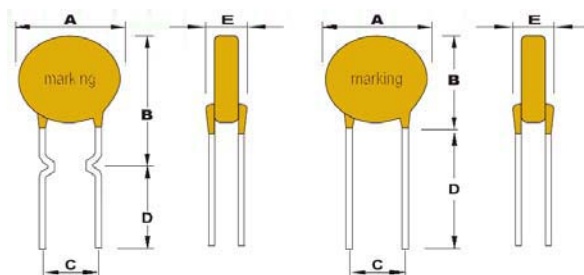


# PPTC RESETTABLE FUSE

# Radial Leaded-RDL 60V 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
RDL60V010	7.4	12.7	5.1	0.7	7.6	3.1	1	0.51 dia.	Sn/CuFe
RDL60V017	7.4	12.7	5.1	0.7	7.6	3.1	1	0.51 dia.	Sn/CuFe
RDL60V020	7.4	12.7	5.1	0.7	7.6	3.1	1	0.51 dia.	Sn/CuFe
RDL60V025	7.4	12.7	5.1	0.7	7.6	3.1	1	0.51 dia.	Sn/CuFe
RDL60V030	7.4	13.4	5.1	0.7	7.6	3.1	1	0.51 dia.	Sn/CuFe
RDL60V040	7.6	13.7	5.1	0.7	7.6	3.1	1	0.51 dia.	Sn/CuFe
RDL60V050	7.9	13.7	5.1	0.7	7.6	3.1	1	0.51 dia.	Sn/Cu
RDL60V065	9.7	15.2	5.1	0.7	7.6	3.1	1	0.51 dia.	Sn/Cu
RDL60V075	10.4	16.0	5.1	0.7	7.6	3.1	1	0.51 dia.	Sn/Cu
RDL60V090	11.7	16.7	5.1	0.7	7.6	3.1	1	0.51 dia.	Sn/Cu
RDL60V110	13.0	18.0	5.1	0.7	7.6	3.1	2	0.81 dia.	Sn/Cu
RDL60V135	14.5	19.6	5.1	0.7	7.6	3.1	2	0.81 dia.	Sn/Cu
RDL60V160	16.3	21.3	5.1	0.7	7.6	3.1	2	0.81 dia.	Sn/Cu
RDL60V185	17.8	22.9	5.1	0.7	7.6	3.1	2	0.81 dia.	Sn/Cu
RDL60V250	21.3	26.4	10.2	0.7	7.6	3.1	2	0.81 dia.	Sn/Cu
RDL60V300	24.9	30.0	10.2	0.7	7.6	3.1	2	0.81 dia.	Sn/Cu
RDL60V375	28.5	33.5	10.2	0.7	7.6	3.1	2	0.81 dia.	Sn/Cu

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

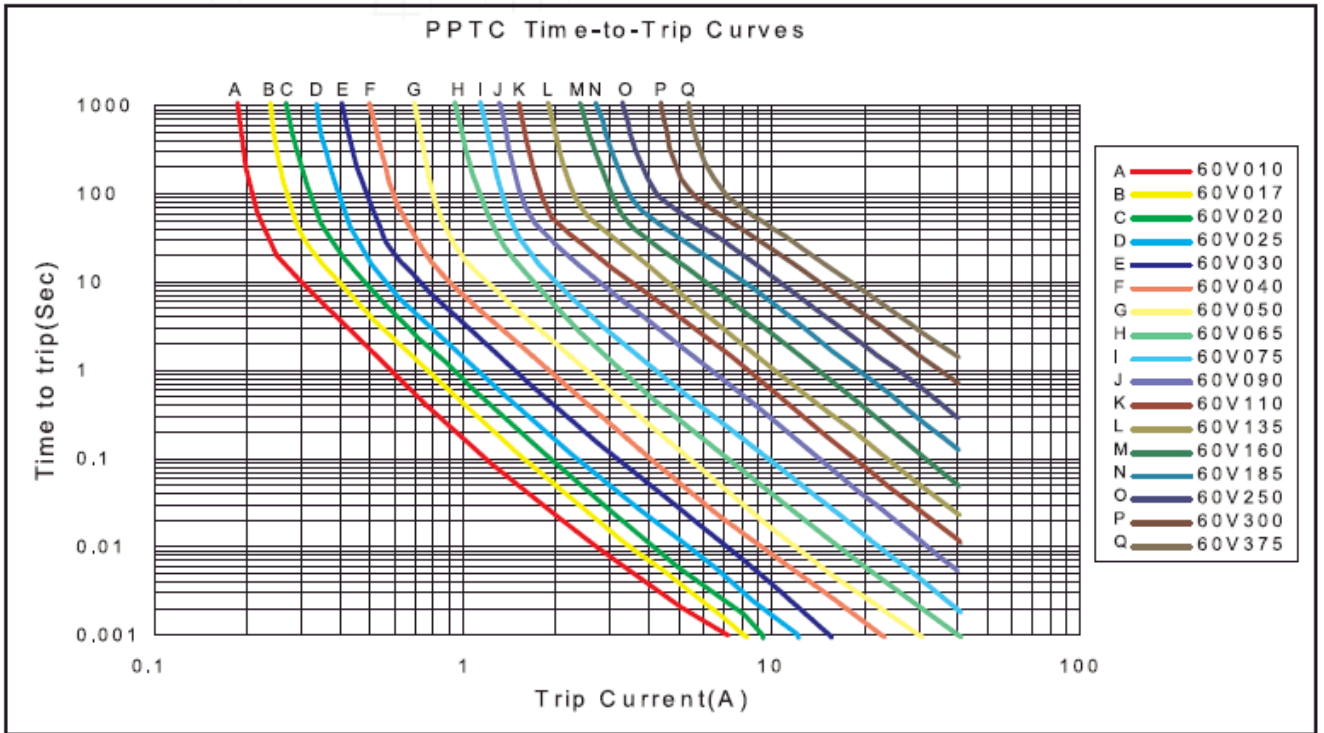
## Electrical Characteristics at 23°C :

Model	V Max. (Volts)	I Max. (Amps)	I hold (Amps)	I trip (Amps)	R min (Ω)	R (Ω)	R1 max (Ω)	P(d) (Ω)
RDL60V010	60	40	0.10	0.20	2.50	4.50	7.50	0.38
RDL60V017	60	40	0.17	0.64	2.00	3.20	7.30	0.48
RDL60V020	60	40	0.20	0.40	1.83	2.84	4.40	0.40
RDL60V025	60	40	0.25	0.50	1.25	1.95	3.00	0.45
RDL60V030	60	40	0.30	0.60	0.88	1.36	2.10	0.50
RDL60V040	60	40	0.40	0.80	0.55	0.86	1.29	0.55
RDL60V050	60	40	0.50	1.00	0.50	0.7	1.17	0.75
RDL60V065	60	40	0.65	1.30	0.31	0.48	0.72	0.90
RDL60V075	60	40	0.75	1.50	0.25	0.40	0.60	0.90
RDL60V090	60	40	0.90	1.80	0.20	0.31	0.47	1.00
RDL60V110	60	40	1.10	2.20	0.15	0.25	0.38	1.50
RDL60V135	60	40	1.35	2.70	0.12	0.19	0.30	1.70
RDL60V160	60	40	1.60	3.20	0.09	0.14	0.22	1.90
RDL60V185	60	40	1.85	3.70	0.08	0.12	0.19	2.10
RDL60V250	60	40	2.50	5.00	0.05	0.08	0.13	2.50
RDL60V300	60	40	3.00	6.00	0.04	0.06	0.10	2.80
RDL60V375	60	40	3.75	7.50	0.03	0.05	0.08	3.20

# PPTC RESETTABLE FUSE

# Radial Leaded-RDL 60V Series

## Construction and Dimension:



## Thermal Derating Chart

Unit:Amps

TEMP(C <sup>0</sup> )	-40	-20	0	23	40	50	60	70	85
RDL60V010	0.17	0.15	0.14	0.10	0.08	0.07	0.06	0.05	0.04
RDL60V017	0.28	0.25	0.22	0.17	0.15	0.12	0.11	0.09	0.08
RDL60V020	0.32	0.28	0.25	0.20	0.17	0.15	0.13	0.11	0.08
RDL60V025	0.41	0.36	0.31	0.25	0.21	0.20	0.17	0.14	0.10
RDL60V030	0.48	0.43	0.38	0.30	0.25	0.23	0.19	0.16	0.12
RDL60V040	0.64	0.56	0.49	0.40	0.33	0.30	0.25	0.22	0.17
RDL60V050	0.80	0.69	0.62	0.50	0.45	0.35	0.30	0.25	0.20
RDL60V065	1.05	0.90	0.80	0.65	0.55	0.45	0.40	0.35	0.25
RDL60V075	1.20	1.10	0.90	0.75	0.65	0.55	0.50	0.40	0.30
RDL60V090	1.40	1.25	1.05	0.90	0.75	0.710	0.60	0.50	0.35
RDL60V110	1.75	1.55	1.35	1.10	0.90	0.80	0.70	0.60	0.45
RDL60V135	2.15	1.90	1.65	1.35	1.11	1.00	0.90	0.75	0.55
RDL60V160	2.50	2.25	1.95	1.60	1.35	1.15	1.05	0.90	0.70
RDL60V185	2.90	2.25	2.25	1.85	1.55	1.30	1.20	1.00	0.75
RDL60V250	3.90	3.45	3.00	2.50	2.50	1.80	1.60	1.5	1.00
RDL60V300	4.70	4.15	3.60	3.00	2.45	2.15	1.90	1.65	1.20
RDL60V375	5.85	5.15	4.50	3.75	3.05	2.70	2.35	2.00	1.50

## 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 RDL30V	090 ~ 110	Reel packaging Ammo packaging	3000 / pack
		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  $I_{hold}$