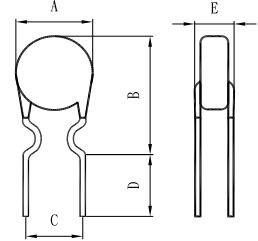


Type R60 Series



Polymeric Positive Temperature Coefficient
(PPTC)



Agency File Number

UL E201504/E319079
TUV 43486

Electrical Characteristic

Operating/Storage Temperature
-40°C to +85°C

Maximum Device Surface Temperature
In Tripped State 125°C

Passive Aging
+85°C, 1000Hours, ±5% Typical Resistance Change

Humidity Aging
+85°C, 85%R.H., 1000Hours, ±5% Typical Resistance Change

Thermal Shock:
+85°C to -40°C, ±10% Typical Resistance Change

Vibration
MIL-STD-202C, Method 201, No Change

Physical Dimension (Unit: mm/inch)

Model	A	B	C	D	E	F	Lead Style
	Max.	Max.	Typ.	Min.	Max.	Max.	
R60-010	7.4/0.29	12.7/0.50	5.1/0.20	7.6/0.3	3.1/0.12	1.0/0.04	Kink
R60-017	7.4/0.29	12.7/0.50	5.1/0.20	7.6/0.3	3.1/0.12	1.7/0.07	Kink
R60-020	7.4/0.29	12.7/0.48	5.1/0.20	7.6/0.3	3.1/0.12	1.0/0.04	Kink
R60-025	7.4/0.29	12.7/0.50	5.1/0.20	7.6/0.3	3.1/0.12	1.0/0.04	Kink
R60-030	7.4/0.29	13.0/0.51	5.1/0.20	7.6/0.3	3.1/0.12	1.0/0.04	Kink
R60-040	7.6/0.30	13.5/0.53	5.1/0.20	7.6/0.3	3.1/0.12	1.2/0.05	Kink
R60-050	7.9/0.31	13.7/0.54	5.1/0.20	7.6/0.3	3.1/0.12	1.2/0.05	Kink
R60-065	9.7/0.38	14.5/0.57	5.1/0.20	7.6/0.3	3.1/0.12	1.5/0.06	Kink
R60-075	10.4/0.41	15.2/0.60	5.1/0.20	7.6/0.3	3.1/0.12	1.5/0.06	Kink
R60-090	11.7/0.46	15.8/0.62	5.1/0.20	7.6/0.3	3.1/0.12	1.5/0.06	Kink
R60-110	13.0/0.51	18.0/0.71	5.1/0.20	7.6/0.3	3.1/0.12	1.2/0.05	Straight
R60-135	14.5/0.57	19.6/0.77	5.1/0.20	7.6/0.3	3.1/0.12	1.2/0.05	Straight
R60-160	16.3/0.64	21.3/0.84	5.1/0.20	7.6/0.3	3.1/0.12	1.5/0.06	Straight
R60-185	17.8/0.70	22.9/0.90	5.1/0.20	7.6/0.3	3.1/0.12	1.5/0.06	Straight
R60-250	21.3/0.84	26.4/1.04	10.2/0.40	7.6/0.3	3.1/0.12	1.7/0.07	Straight
R60-300	24.9/0.98	30.0/1.18	10.2/0.40	7.6/0.3	3.1/0.12	2.0/0.08	Straight
R60-375	28.5/1.12	33.5/1.32	10.2/0.40	7.6/0.3	3.0/0.12	2.0/0.08	Straight

Packaging

In Bulk: 500 pcs per box.

On Tap: Ammo pack

R60-010~R60-090 3000 PCS, R60-110~R60-185 1500 PCS
R60-017 2500 PCS, R60-250~R60-375 -

Physical Characteristic

Material

R60-010: Tin-plated nickel-copper alloy, 0.205mm² (24AWG), Ø0.51mm(0.020 in).
R60-017~040: Tin-plated copper-clad steel, 0.205mm² (24AWG), Ø0.51mm(0.020 in).
R60-050~090: Tin-plated copper, 0.205mm² (24AWG), Ø0.51mm(0.020 in).
R60-110 ~ 375: Tin-plated copper, 0.52mm² (20AWG), Ø0.81mm(0.032 in).

Electrical Properties

Model	V _{max} (Vdc)	I _{max} (A)	I _{hold} @25°C (A)	I _{trip} @25°C (A)	P _d Max. (W)	Maximum Time To Trip		Resistance			Agency Approval	
						Current (A)	Time (Sec)	R _{i min} (Ω)	R _{i max} (Ω)	R _{1 max} (Ω)	UL	TUV-PS
R60-010	60	40	0.10	0.20	0.38	0.50	4.0	2.50	4.50	7.50	*	*
R60-017	60	40	0.17	0.34	0.48	0.85	3.0	2.50	5.21	8.00	*	*
R60-020	60	40	0.20	0.40	0.41	1.00	2.2	1.25	2.75	4.40	*	*
R60-025	60	40	0.25	0.50	0.45	1.25	2.5	0.65	1.95	3.00	*	*
R60-030	60	40	0.30	0.60	0.49	1.50	3.0	0.45	1.33	2.10	*	*
R60-040	60	40	0.40	0.80	0.56	2.00	3.8	0.40	0.86	1.29	*	*
R60-050	60	40	0.50	1.00	0.77	2.50	4.0	0.35	0.77	1.17	*	*
R60-065	60	40	0.65	1.30	0.88	3.25	5.3	0.25	0.48	0.72	*	*
R60-075	60	40	0.75	1.50	0.92	3.75	6.3	0.20	0.40	0.60	*	*
R60-090	60	40	0.90	1.80	0.99	4.50	7.2	0.15	0.31	0.47	*	*
R60-110	60	40	1.10	2.20	1.50	5.50	8.2	0.13	0.25	0.38	*	*
R60-135	60	40	1.35	2.70	1.70	6.75	9.6	0.10	0.19	0.30	*	*
R60-160	60	40	1.60	3.20	1.90	8.00	11.4	0.07	0.14	0.22	*	*
R60-185	60	40	1.85	3.70	2.10	9.25	12.6	0.06	0.12	0.19	*	*
R60-250	60	40	2.50	5.00	2.50	12.50	15.6	0.04	0.08	0.13	*	*
R60-300	60	40	3.00	6.00	2.80	15.00	19.8	0.03	0.06	0.10	*	*
R60-375	60	40	3.75	7.50	3.20	18.75	24.0	0.02	0.05	0.08	*	*

I_{hold} = Hold Current : maximum current device will sustain for 4 hours without tripping in 25°C still air.

I_{trip} = Trip Current : minimum current at which the device will trip in 25°C still air.

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

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

P_d = Power dissipated from device when in the tripped state at 25°C still air.

R_{i min/max} = Minimum/Maximum resistance of device in initial (un-soldered) state.

R_{1 max} = Maximum resistance of device at 25°C measured one hour after tripping.

CAUTION : Operation beyond the specified ratings may result in damage and possible arcing and flame.