

# RU Series Radial Leaded PTC





Application:	Wide variety of electronic equipment
Product Features:	Low resistance, High hold current, Solid state, Radial-leaded product ideal for up to 30V
Operation Current:	900mA~9A
Maximum Voltage:	30VDC
Temperature Range:	-40°C to 85°C
Agency Recognition:	UL, C-UL, TÜV

## **Electrical Characteristics (23°C)**

Part	Hold	Trip	Max.Time	Maximum	Rated	Typical	Resistance Tolerance	
Number	Current	Current	to Trip	Current	Voltage	Power	RMIN	R1MAX
	IH, A	IT, A	at 5xIH	IMAX, A	VMAX,VDC	Pd, W	ohms	ohms
RU090-30	0.90	1.8	5.9	100	30	0.6	0.070	0.22
RU110-30	1.10	2.2	6.6	100	30	0.7	0.050	0.17
RU110S-30	1.10	2.2	6.6	100	30	0.7	0.050	0.17
RU135-30	1.35	2.7	7.3	100	30	0.8	0.040	0.13
RU160-30	1.60	3.2	8.0	100	30	0.9	0.030	0.11
RU185-30	1.85	3.7	8.7	100	30	1.0	0.030	0.09
RU250-30	2.50	5.0	10.3	100	30	1.2	0.020	0.07
RU300-30	3.00	6.0	10.8	100	30	2.0	0.020	0.08
RU400-30	4.00	8.0	12.7	100	30	2.5	0.010	0.05
RU500-30	5.00	10.0	14.5	100	30	3.0	0.010	0.05
RU600-30	6.00	12.0	16.0	100	30	3.5	0.005	0.04
RU700-30	7.00	14.0	17.5	100	30	3.8	0.005	0.03
RU800-30	8.00	16.0	18.8	100	30	4.0	0.005	0.02
RU900-30	9.00	18.0	20.0	100	30	4.2	0.005	0.02

IH=Hold current-maximum current at which the device will not trip at 23°C still air.

IT=Trip current-minimum current at which the device will always trip at 23°C still air.

V MAX=Maximum voltage device can withstand without damage at its rated current.

I MAX= Maximum fault current device can withstand without damage at rated voltage (V max).

Pd=Typical power dissipated from device when in the tripped state in 23°C still air environment.

RMIN=Minimum device resistance at 23°C.

R1MAX=Maximum device resistance at 23°C, 1 hour after tripping .

Physical specifications:

Lead material: RU090~RU250 Tin plated copper, 24 AWG.

RU300~RU900 Tin plated copper, 20 AWG.

Soldering characteristics: MIL-STD-202, Method 208E.

Insulating coating: Flame retardant epoxy, meet UL-94V-0 requirement.



### **RU Product Dimensions (Millimeters)**



Figure 1 RU090-30 ~ RU250-30 Lead Size: 24AWG, Ø 0.51 mm Diameter



Figure 2 RU300-30 ~ RU900-30 Lead Size : 20AWG, Ø 0.81 mm Diameter

Part	Figure	А	В	С	D	E	F
Number		Maximum	Maximum	Typical	Minimum	Maximum	Typical
RU090-30	1	7.4	12.2	5.1	7.6	3	0.9
RU110-30	1	7.4	14.2	5.1	7.6	3	0.9
RU110S-30	1	7.4	12.0	5.1	7.6	3	0.9
RU135-30	1	8.9	13.5	5.1	7.6	3	0.9
RU160-30	1	8.9	15.2	5.1	7.6	3	0.9
RU185-30	1	10.2	15.7	5.1	7.6	3	0.9
RU250-30	1	11.4	18.3	5.1	7.6	3	0.9
RU300-30	2	11.4	17.3	5.1	7.6	3	1.2
RU400-30	2	14.0	20.1	5.1	7.6	3	1.2
RU500-30	2	14.0	24.9	10.2	7.6	3	1.2
RU600-30	2	16.5	24.9	10.2	7.6	3	1.2
RU700-30	2	19.1	26.7	10.2	7.6	3	1.2
RU800-30	2	21.6	29.2	10.2	7.6	3	1.2
RU900-30	2	24.1	29.7	10.2	7.6	3	1.2



#### **Thermal Derating Curve**



## Typical Time-To-Trip at 23°C



Specifications are subject to change without notice. Customer should verify actual device performance in their specific applications.



#### **Standard Package**

P/N	Pcs /Bag	Reel/Tape
RU090-30	500	3K
RU110-30	500	ЗK
RU110S-30	500	ЗK
RU135-30	300	ЗK
RU160-30	300	3K
RU185-30	300	ЗK
RU250-30	300	ЗK
RU300-30	200	1.5K
RU400-30	200	1.5k
RU500-30	200	
RU600-30	100	
RU700-30	100	
RU800-30	100	
RU900-30	100	

1- Operation beyond the specified maximum ratings or improper use may result in damage and possible electrical arcing and/or flame.

2 -PPTC device are intended for occasional overcurrent protection. Application for repeated overcurrent condition and/or prolonged trip are not anticipated.

3- Avoid contact of PPTC device with chemical solvent. Prolonged contact will damage the device performance.