

## Polymer PTC Resettable 600V Series

### Features:

- Radial leaded Devices
- Cured, flame retardant epoxy polymer insulating material meets UL94V-0
- Rohs compliant and lead-free

### Product Dimensions

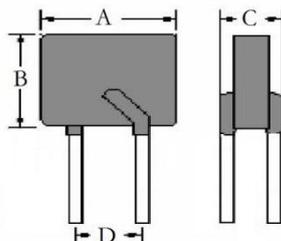


Fig1

Unit : mm

Model	Dimensions (mm)				Lead material	Shape
	A(max)	B(max)	C(max)	D(typ)	Tinned matel(mm)	Fig
600V-030	15	15	5.5	5.1	22AWG/Φ0.6	1
600V-040	15	15	5.5	5.1	22AWG/Φ0.6	1
600V-060	15	15	5.5	5.1	22AWG/Φ0.6	1
600V-080	15	15	5.5	5.1	22AWG/Φ0.6	1
600V-110	15	15	5.5	5.1	22AWG/Φ0.6	1
600V-150	15	15	5.5	5.1	22AWG/Φ0.6	1
600V-160	15	15	5.5	5.1	22AWG/Φ0.6	1
600V-200	15	15	5.5	5.1	22AWG/Φ0.6	1

 Note: ① Dimensions A, B, C is the maximum size, D values are typical tolerance of  $\pm 0.75\text{mm}$ 

### Thermal Derating Chart-IH (A)

Model	Maximum ambient operating temperatures (°C)									
	-40	-20	0	25	30	40	50	60	70	85
600V-Series	147%	138%	119%	100%	92%	83%	73%	64%	55%	42%



**Electrical Characteristic**

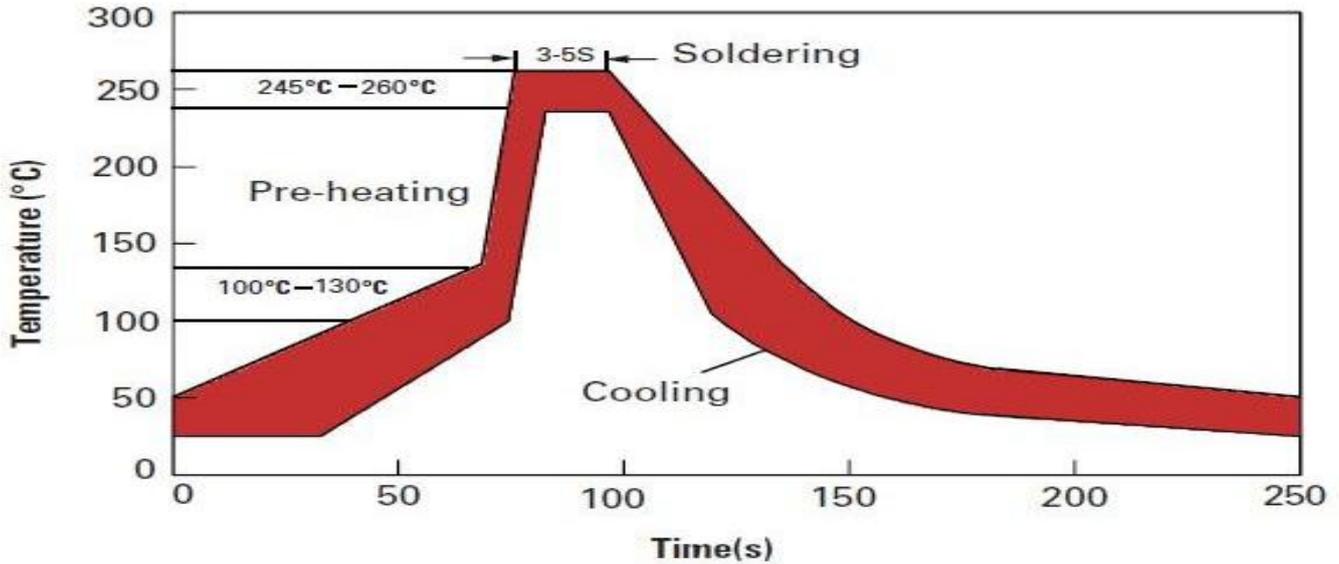
Model	I <sub>Hold</sub> (A)	I <sub>Trip</sub> (A)	V <sub>max</sub>	I <sub>max</sub>	Pd <sub>Max</sub>	Maximum Time to Trip		Resistance (Ω)		
				A	W	Current (A)	Time (S)	Rmin	Rmax	R1max
600V-030	0.03	0.06	600	3	1.0	1.0	10	30	60	90
600V-040	0.04	0.08	600	3	1.0	1.0	7	15	40	60
600V-060	0.06	0.12	600	3	1.0	1.0	8	15	45	45
600V-080	0.08	0.16	600	3	1.0	1.0	8	10	30	35
600V-110	0.11	0.22	600	3	1.0	1.0	8	6	16	24
600V-150	0.15	0.30	600	3	1.0	1.0	9	5	14	22
600V-160	0.16	0.32	600	3	1.0	1.0	10	4	12	18
600V-200	0.20	0.40	600	3	1.0	1.0	15	5	13	24

**Physical Characteristics and Environmental Specifications**

Test	Conditions	Resistance change
Passive aging	+85°C, 1000hrs	±8% typical
Humidity aging	+85°C, 85%R.H.1000hrs	±8% typical
Thermal shock	+125°C to -55°C, 10times	±12% typical
Resistance to solvent	MIL-STD-202, Method 215	No change
Vibration	MIL-STD-202, Method 201	No change

**Operation Condition**

1. Ambient temperature: -40°C ~ 85°C
2. Humidity: ≤95%HR(40°C)
3. Atmospheric pressure: 86Kpa ~ 106Kpa.
4. Vibration frequency: 10Hz ~ 50Hz.
5. Acceleration: 98m/s<sup>2</sup>.
6. Storage temperature: -40°C ~ 85°C.
7. Soldering
  - 7.1 Wave Soldering:
    - Soldering Temperature: 260°C ~ 270°C
    - Soldering Time: ≤3sec.



Soldering Position: Resettable fuse wire and the bottom  $\geq 6\text{mm}$ .

**recommended curve**

7.2 Manual soldering

Soldering Temperature:  $250^{\circ}\text{C} \sim 280^{\circ}\text{C}$

Soldering Time:  $\leq 3\text{sec}$ .

Soldering Position: Resettable fuse wire and the bottom  $\geq 6\text{mm}$ .

**Electrical Specifications:**

$I_H$ =Hold current:maximum current at which the device will not trip at  $25^{\circ}\text{C}$  still air.

$I_T$ =Trip current:minimum current at which the device will nalways at  $25^{\circ}\text{C}$  still air.

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

$I_{max}$ =Maximum fault current device can withstand tithout damage at rated voltage.

$T_{trip}$ =Maximum time to trip(s) at assigned current.

$P_d$ =Typical power dissipation:typical amount of power dissipated by the decice when in state air environment.

$R_{min}$ =Minimum device resistance at  $25^{\circ}\text{C}$  prior to tripping.

$R_{max}$ =Maximum device resistance at  $25^{\circ}\text{C}$  prior to tripping.

**Warning:**

PPTC devices are intended for protection against occasional over-current or over-temperature fault conditions,and should not be used when repeated fault conditions are anticipated.Operation beyond maximum tatings of improper use may result in device damage and possible electrical arcing and flame.

**Notes:**

The specification is intended to present application,product and technical data to assist the user in selecting PPTC circuit production devices,However,users should independently evaluate and test the suitability of each product.YINT makes on warranties as to the accuracy or completeness of the information and disclaims any liatlity resulting form its use,YINT's only obligations are those im the YINT Standard Rerms and Conditions of Sale and in no case will YINT be liable for any incidental,imdirect,or consequential damages arising from the sale,resale,or misues of its products.YINT reserves the right to change of update,without notice,any information contained in this specification.