



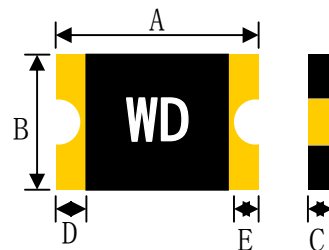
# Shenzhen Wondhope Electric Co.,Ltd.

Add:2/F, Bldg 3, Minxing Industrial Zone, Minkang Rd, Minzhi Office, Longhua New Area, Shenzhen Tel: 86-0755-29503668-8047 Fax :86-0755-29503998 Email:sunny@wondhope.com      P.C.:518131	package:	SMD 1210
	Model:	WH 020
	V <sub>max</sub> :	24V
	I <sub>max</sub> :	20A
	SS:	ROHS
	Web:	<a href="http://www.wondhope.com">www.wondhope.com</a>

## Specification Sheet

### Marking :

- W: Wondhope
- D: Part identification



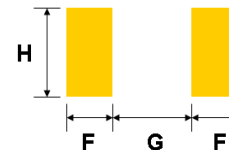
Appearance and size of production

### Solderability:

Meets EIA specification RS186-9E and ANSI/J-STD-002 Category 3

### Terminal Pad Materials:

Sn-plated nickel-copper, lead-free device.



Recommended pad layout

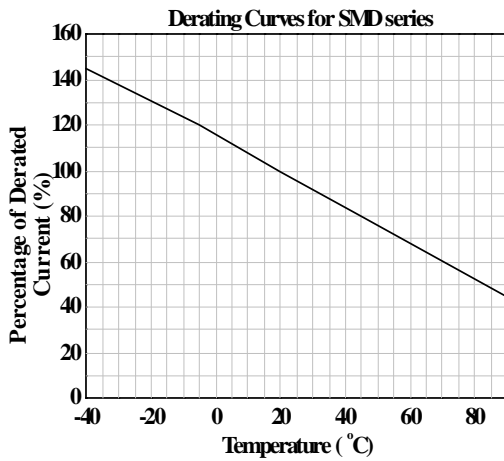
### Dimensions:

	A		B		C		D	E	F	G	H
UNIT	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MIN			
mm	3.00	3.43	2.35	2.80	0.40	0.90	0.30	0.20	1.00	2.00	2.50
inch	0.12	0.14	0.09	0.11	0.02	0.04	0.01	0.01	0.04	0.08	0.10

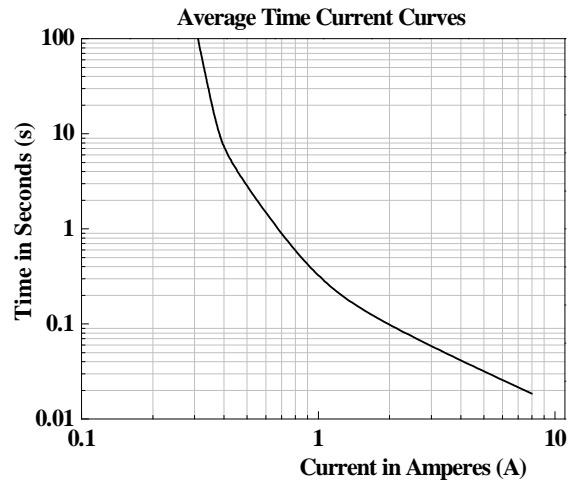
### Performance Specification:

Model	V <sub>max</sub> (V <sub>dc</sub> )	I <sub>max</sub> (A)	I <sub>hold</sub> @25°C (A)	I <sub>trip</sub> @25°C (A)	P <sub>d</sub> Tpy. (W)	Maximum Time To Trip		Resistance	
						Current (A)	Time (Sec)	R <sub>i</sub> min (Ω)	R <sub>1</sub> max (Ω)
SMD020	24	20	0.20	0.40	0.80	8.0	0.20	0.40	5.00
V <sub>max</sub> : Maximum voltage , device can withstand without damage at rated current;									
I <sub>max</sub> : Maximum fault current, device can withstand without damage at rated voltage;									
I <sub>hold</sub> : Hold Current.,device will sustain for 30min without tripping in 25°C still air;									
I <sub>trip</sub> : Minimum current at which the device will trip in 25°C still air;									
P <sub>d</sub> : Power dissipated from device when in the tripped state in 25°C still air;									
R <sub>i</sub> min: Minimum resistance of device in initial (un-soldered) state;									
R <sub>1</sub> max: Maximum resistance of device at 25°C measured one hour post reflow.									

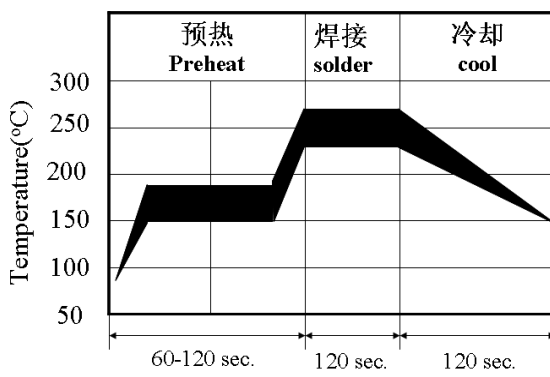
## Average Time Current Curve



## Average Time Current Curve at 25°C



## Solder reflow conditions



- 1、 Recommended reflow methods: IR, vapor phase oven, hot air oven.
- 2、 Devices are not designed to be wave soldered to the bottom side of the board.
- 3、 Recommended maximum paste thickness is 0.25 mm (0.010 inch).
- 4、 Devices can be cleaned using standard method and solvents.

**Note:** If reflow temperatures exceed the maximum recommended temperature chart (260oC), components may be damaged and fail to specifications.

## Storage and Handling

Storage conditions: 30°C max, 60% R.H. Devices may not meet specified performance if storage conditions are exceeded.

## Order Information

WD=Trademark, SMD1210=Packaging, 020=Model  
4500pcs/Reel

## WARNING:

- 1、 Use PPTC exceed by the maximum rating and improper use may result in device damage and possible electrical arcing and flame.
- 2、 PPTC are designed for protection against over current or temperature fault conditions and should not be used when repeated fault conditions or prolonged trip events are anticipated.
- 3、 Device performance can be impacted negatively if devices are handled in a manner inconsistent with recommended electronic, thermal, and mechanical procedures for electronic components.
- 4、 Use PPTC with a large inductance in circuit will generate a circuit voltage above the rated voltage of the PPTC.
- 5、 Avoid impact PPTC device its thermal expansion like placed under pressure or installed in limited space.
- 6、 If any quality problems caused by improper use mentioned above, our company is not responsible.