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SHENZHEN WONDHOPE ELECTRIC.CO.,LTD

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Guanlan, Longhua, Shenzhen, China

封装 (package): SMD 1812

型号 (Model): WH 050

最大电压 (V_{max}): 16V

电话 (Tel): 86-0755-29503668 29503690 29503691

最大电流 (I_{max}): 40A

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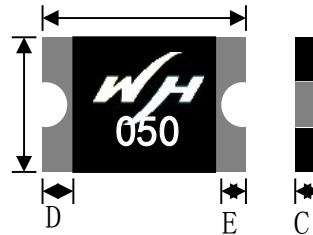
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产品规格书 Specification Sheet

产品标识/Marking:

WH: 万瑞和(Wondhope)

050: 工作电流(hold current)



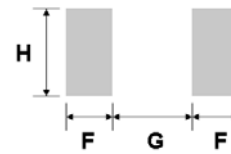
产品外形尺寸
/Appearance
and size of
production

焊点可焊性/Solderability:

符合EIA规定RS186-9E 和ANSI/J-STD-002
第3类标准/Meets EIA specification RS186-
9Eand ANSI/J-STD-002 Category 3

焊点材料/Terminal Pad Materials:

无铅镀锡的镀镍铜箔/Sn-plated nickle-copper, lead-free device.



推荐焊盘设计
/Recommended
pad layout

产品尺寸/Dimensions:

| | A | | B | | C | | D | E | F | G | H |
|------|------|------|------|------|------|------|------|------|------|------|------|
| UNIT | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MIN | | | |
| mm | 4.37 | 4.73 | 3.07 | 3.41 | 0.4 | 0.9 | 0.3 | 0.25 | 1.75 | 3.2 | 3.2 |
| inch | 0.17 | 0.19 | 0.12 | 0.13 | 0.02 | 0.04 | 0.01 | 0.01 | 0.07 | 0.12 | 0.12 |

电气特性/Performance Specification:

| Model | V_{max} (V_{dc}) | I_{max} (A) | I_{hold} @25°C (A) | I_{trip} @25°C (A) | P_d Tpy. (W) | Maximum Time To Trip | | Resistance | |
|--------|---------------------------|------------------|----------------------------|----------------------------|----------------------|-------------------------|---------------|--------------|--------------|
| | | | | | | Current t | Time (Sec) | Rimin (Ω) | R1max (Ω) |
| SMD050 | 16 | 40 | 0.5 | 1.0 | 0.8 | 8.0 | 0.15 | 0.150 | 1.200 |

V_{max} : 产品在规定电流下工作不被破坏的最大电压;

/Maximum voltage, device can withstand without damage at rated current;

I_{max} : 产品在规定电压下工作不被破坏的最大电流;

/ Maximum fault current, device can withstand without damage at rated voltage;

I_{hold} : 产品在25°C静止空气中30分钟不动作的最大工作电流;

/ Hold Current.,device will sustain for 30min without tripping in 25°C still air;

I_{trip} : 产品在25°C静止空气中动作的最小电流;

/ Minimum current at which the device will trip in 25°C still air;

P_d : 产品在25°C静止空气中保护状态中消耗的功率;

/ Power dissipated from device when in the tripped state in 25°C still air;

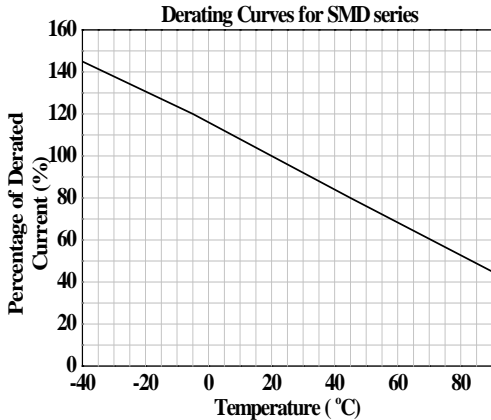
R_{imin} : 满足功能要求的最小成品电阻值;

/Minimum resistance of device in initial (un-soldered) state;

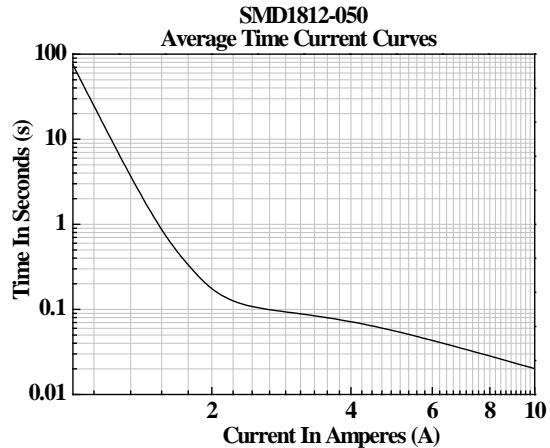
$R1_{max}$: 焊接完1小时, 产品在25°C静止空气中的最大电阻值。

/ Maximum resistance of device at 25°C measured one hour post reflow.

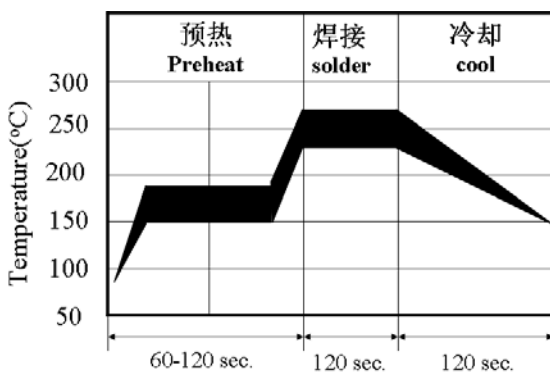
电流折减与环境温度曲线图 /Average Time Current Curve



25°C时动作时间曲线图 /Average Time Current Curve at 25°C



回流焊接条件/Solder reflow conditions



注意：如果回流焊温度超过图表建议最高温度 (260°C)，元件可能损坏而达不到规范要求。

1、建议回流方法：红外线、蒸汽炉、热空气炉；
/Recommended reflow methods: IR, vapor phase oven, hot air oven.

2、使用于波焊制程时，不可将元件置于电路板之背面/底面；
/Devices are not designed to be wave soldered to the bottom side of the board.

3、建议焊锡膏涂抹厚度最大为0.25mm/0.010 inch；
/Recommended maximum paste thickness is 0.25 mm (0.010 inch).

4、元件可使用一般业界标准程序和溶剂来实施清洁。
/Devices can be cleaned using standard method and solvents.

/Note: If reflow temperatures exceed the recommended profile, devices may not meet the performance

储存与放置/Storage and Handling

储存条件：低于30 °C，相对湿度小于60%。如果超出储存条件，元件可能达不到规范要求。/Storage conditions: 30°C max, 60% R.H.Devices may not meet specified performance if storage conditions are exceeded.

订购须知/Order Information

WH=公司标识 /Trademark, SMD1812=封装尺寸/ Packaging, 050=产品型号 /Model
包装数量2000个/盘 2000pcs/Reel

注意事项/ WARNING:

- 1、超过额定范围或不正确地使用PPTC元件可能导致元件的损坏，并可能引起电弧和火焰；
/Use PPTC exceed by the maximum rating and improper use may result in device damage and possible electrical arcing and flame.
- 2、PPTC元件一般只用于偶然的过流或超温故障时的保护，切勿用于故障频繁发生或预期会发生长时间故障的场合；
/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、如果不按照建议安装、测试和使用产品，元件性能可能会受到不利影响；
/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、在电感强度大的电路中使用，可能会产生超过PPTC元件的额定电压的回路电压；
/Use PPTC with a large inductance in circuit will generate a circuit voltage above the rated voltage of the PPTC.
- 5、PPTC元件应用时不能长期处于压力下，使其缺乏膨胀空间而影响其性能，如处于高压或安装在受限的狭小空间里。
/Avoid impact PPTC device its thermal expansion like placed under pressure or installed in limited space.
- 6、由于上述原因造成的质量问题，我司概不负责。/If any quality problems caused by improper use mentioned above,our company is not responsible.