

PRODUCT SPECIFICATION

50CF RoHS SERIES

ISSUED DATE: REV. NO.:

> DOC. NO.: PAGE:

2019/10/31 80A HLD-PSI-8070

Page 1 of 9

制定 PREPARED BY

审核 **CHECKED BY**

批准 **APPROVED BY**

1 适用范围/SCOPE

本规格书适用于公司按照 IEC 60127 标准生产的 50CF RoHS 系列 HOLLY® 商标的小型保险丝管。

This specification defines the technical requirements of miniature fuse type 50CF RoHS series with H0LLY® brand, which are according to IEC 60127.

产品部件号为: 额定电流 额定电压 Construction of part no.: rated voltage rated current type 例如/ Example: <u>50CF</u> 020 Н

* 额定电压/ Rated Voltage: H - 250V

产品部件号/ PART NUMBER

产品部件号 PART NUM BER	型号规格 MODEL DETAIL	产品部件号 PART NUMBER	型号规格 MODEL DETAIL
50CF-0200H	50CF F200mAH 250V	50CF-032H	50CF F3.15AH 250V
50CF-0250H	50CF F250mAH 250V	50CF-040H	50CF F4AH 250V
50CF-0315H	50CF F315mAH 250V	50CF-050H	50CF F5AH 250V
50CF-0400H	50CF F400mAH 250V	50CF-063H	50CF F6.3AH 250V
50CF-0500H	50CF F500mAH 250V	50CF-080H	50CF F8AH 250V
50CF-0630H	50CF F630mAH 250V	50CF-100H	50CF F10AH 250V
50CF-0800H	50CF F800mAH 250V	50CF-120H	50CF F12AH 250V
50CF-010H	50CF F1AH 250V	50CF-125H	50CF F12.5AH 250V
50CF-013H	50CF F1.25AH 250V	50CF-150H	50CF F15AH 250V
50CF-016H	50CF F1.6AH 250V	50CF-160H	50CF F16AH 250V
50CF-020H	50CF F2AH 250V	50CF-200H	50CF F20AH 250V
50CF-025H	50CF F2.5AH 250V	1	/

型号规格: <u> 型号</u> 特性符号 额定电流 分断能力符号 额定电压 MODEL DETAIL: Type Characteristic Symbol Rated Current Breaking Capacity Symbol Rated Voltage

例如/ Example: 50CF 2A Η

*特性符号/ Characteristic Symbol: F - 速断型/ Quick-Acting, 分断能力符号/ Breaking Capacity Symbol: H - 高分断能力/ High Breaking Capacity.

2 相关标准/ APPLICABLE STANDARDS

2.1 50CF RoHS 系列产品适用的相关标准是 IEC 60127 和 GB 9364。 Applicable standards for 50CF RoHS series are IEC 60127 and GB 9364.

2.2 认证情况/ APPROVED DETAILS

2.2 伙证用/// / 1110 / 20 / 20 / 20 / 20 / 20 / 20								
额定电压	CC	С	CQC		UR/ CUR		BSI	
RATED VOLTAGE	认证范围 APPROVED RANGE	认证号码 CERT. NO.	认证范围 APPROVED RANGE	认证号码 CERT. NO.	认证范围 APPROVED RANGE) 以证号码 CERT. NO.	认证范围 APPROVE RANGE	D 认证号码 CERT. NO.
250V	250mA~10A	200601020 7194847	12.5A	CQC14012119631	250mA~16A	E156471	250mA~10.	A KM 52652
	_ SEMKO		VDE		KC		PSE	
额定电压 RATED VOLTAGE	认证范围 APPROVED RANGE	认证号码 CERT. NO.	认证范围 APPROVED RANGE	认证号码 CERT. NO.	认证范围 APPROV ED RANGE	认证号码 CERT. NO.	认证范围 APPROVED RANGE	认证号码 CERT. NO.
	250mA~10A				250mA~80	SU05008-8013 C	1A~5A JET 2489-31003-2007 A	
250)/			250m A ~ 10 A	50mA~10A 40020380	1A~2.5A SU05008-8016 c	SU05008-8016 C		
250V	250V	12A~16A 1714407	ZSUINA~ IUA		3.15A~6.3	SU05008-8014 C	6.3A~10A	JET 2489-31003-2008 A
12A~16A	12A~10A 1/1440/			8A~10A	SU05008-8015 C	10.1A~15A	JET 2489-31003-1029	



PRODUCT SPECIFICATION

50CF RoHS SERIES

ISSUED DATE:
REV. NO.:
DOC. NO.:
PAGE:

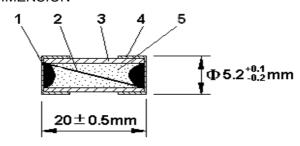
2019/10/31 A08 HLD-PSI-8070 Page 2 of 9

3 公司地址/ADDRESS

中国福建省厦门市翔安区舫山东二路 829 号 829 Fangshan East 2nd Road, Xiang'an, Xiamen, China.

4 构造图/ CONSTRUCTION FIG. & DIMENSION

4.1 DIMENSION (Unit: mm)



编号 No.	品名 PART	材料名 MATERIAL MODEL	备注 NOTE
1	焊锡 Solder	无铅焊锡/ Pb Free	1
2	可熔体/ Element	金属丝/ Metal Wire	1
3	管体/ Tube	陶瓷管/ Ceramic Tube	1
4	铜帽/ Cap	黄铜/ Brass	镀镍/ Nickel Plated
5	填充物/ Filler	石英砂/ Quartz Sand	/

4.2 陶瓷管/ CERAMIC TUBE

陶瓷管无破裂、缺损或污染等现象。

The ceramic tube shall have no defects such as crack, injury and contamination.

4.3 铜帽/ CAP

铜帽应焊接牢固,以保证在未损坏熔断体时,铜帽不能被卸脱。样品在 15 -35 水中浸 24 小时取出后,在每个端帽上均匀施加拉力至 10N,保持 1 分钟,铜帽不应脱落。

Cap should be firmly attached so that it is not possible to remove them without damaging the fuse itself. The samples are immersed in water for 24 hours at a temperature between 15 and 35. After remove from the water, an axial pull steadily increasing to 10N is applied to each cap for 1 minute.

4.4 焊点/ SOLDERING JOINT

焊接铜帽端时,管内和铜帽外表面不能有残留的助焊剂、焊锡等异物。

Soldering joint in end cap shall not be melted during normal operation and shall not have solder chips on tube, element in view and outer surface of caps.

4.5 准直度/ALIGNMENT

保险丝管的全长必须能以保险丝自身的重量全部通过准直度卡规。其具体图形如下。

The entire length of the fuse shall pass through the gauge by the fuses own weight. The construction of gauge is as follows.

Φ D± 0.01mm

5 电气特性/ ELECTRICAL PERFORMANCES

5.1 电压降/ VOLTAGE DROP

熔断体在额定电流条件下,其两端的电压降不应超过下表规定的最大值。



PRODUCT SPECIFICATION

50CF RoHS SERIES

ISSUED DATE: REV. NO.:

> DOC. NO.: PAGE:

2019/10/31 A08 HLD-PSI-8070 Page 3 of 9

The voltage drop across the fuse-link at their rated current shall not exceed the maximum values is in follows.

额定电流 Rated Current	额定电压 Rated Voltage	最大电压降 Maximum Voltage Drop (mV)	最大维持功耗 Maximum Sustained Power Dissipation (W)
100mA 125mA 160mA 200mA		7,000 5,000 4,300 3,800	1.6
250mA 315mA 400mA 500mA 630mA 800mA 1A		2,800 2,500 2,000 1,800 1,500 1,200 1,000	2.5
1.25A 1.6A 2A 2.5A 3.15A 4A 5A 6.3A 8A 10A 12A	250V	800 600 500 400 350 300 250 200 200 200 200 180	4
15A 16A		180	6
20A		180	8

5.2 预飞弧时间电流-特性/PRE-ARCING TIME-CURRENT CHARACTERISTICS

额定电流	2.1I _n	2.7	′5I _n	4	l _n	10I _n
Rated Current	Max.	Min.	Max.	Min.	Max.	Max.
100mA-4A	30min.	10ms	2sec.	3ms	300ms	20ms
>4A-6.3A	30min.	10ms	3sec.	3ms	300ms	20ms
>6.3A-10A	30min.	40ms	20sec.	10ms	1sec.	30ms
>10A	30min.	40ms	20sec.	10ms	1sec.	40ms

5.3 分断能力/ BREAKING CAPACITY

保险丝管的额定分断能力为 1500A, 250V A.C. 和 1000A, 250V D.C.(UR/cUR)。保险丝分断电路后,保险丝管不应破裂、铜帽飞脱、且铜帽两端的绝缘电阻不小于 0.1M 。

Rated breaking capacity of the fuse is 1500A, tested with 250V A.C. and 1000A, tested with 250V D.C. (UR/cUR). And after this test, there should be no damage of the fuse-tube or shattering of the caps. After this test, the insulation resistance between the end caps shall be not less than 0.1M

5.4 耐久性试验/ENDURANCE TEST

耐久性试验过程。/ The process of endurance test is as follows.

A 对熔断体通过 1.2 倍的额定电流 1 小时,然后切断电流 15 分钟,重复此循环 100 次。/ A current 1.2I_n is passed through the fuse-link for a period of 1hour. The current is then switched off for a period of 15 minutes. The cycle is repeated 100 times.

- B 然后对熔断体通以 1.5 倍额定电流 1 小时(I_n 6.3A)或 0.5 小时(I_n > 6.3A)。/ A current 1.5 I_n is then passed through the fuse-link for 1hour(I_n 6.3A) or 0.5hour(I_n > 6.3A).
- C 测量熔断体两端的电压降。试验后 熔断体两端的电压降的增大量不大于试验前测得值的 10%。/ Finally, the voltage drop across the fuse-link is measured. The voltage drop across the fuse-link after the test shall not have increased by more than 10% of the Value measured before the test.
- D 试验后,标记仍应清晰可辨,而且诸如端帽上的焊点不应出现任何明显的劣变。/ After the test, the marking shall still be legible and soldered joints on end caps, for example, shall not show and appreciable deterioration.



PRODUCT SPECIFICATION

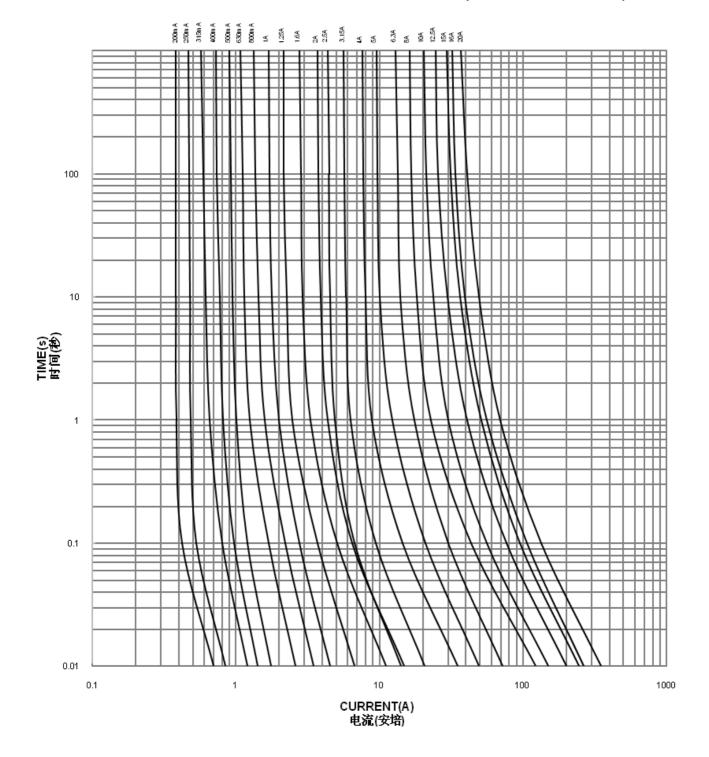
50CF RoHS SERIES

ISSUED DATE:
REV. NO.:
DOC. NO.:
PAGE:

2019/10/31 A08 HLD-PSI-8070 Page 4 of 9

5.5 平均 I-T 特性曲线图(仅供参考)/ THE AVERAGE I-T CHARACTERISTICS CURVE(FOR REFERENCE ONLY)

50CF RoHS 平均I-T曲线图(仅供参考)
50CF RoHS AVERAGE I-T CHARACTERISTICS CURVE(FOR REFERENCE ONLY)





PRODUCT SPECIFICATION

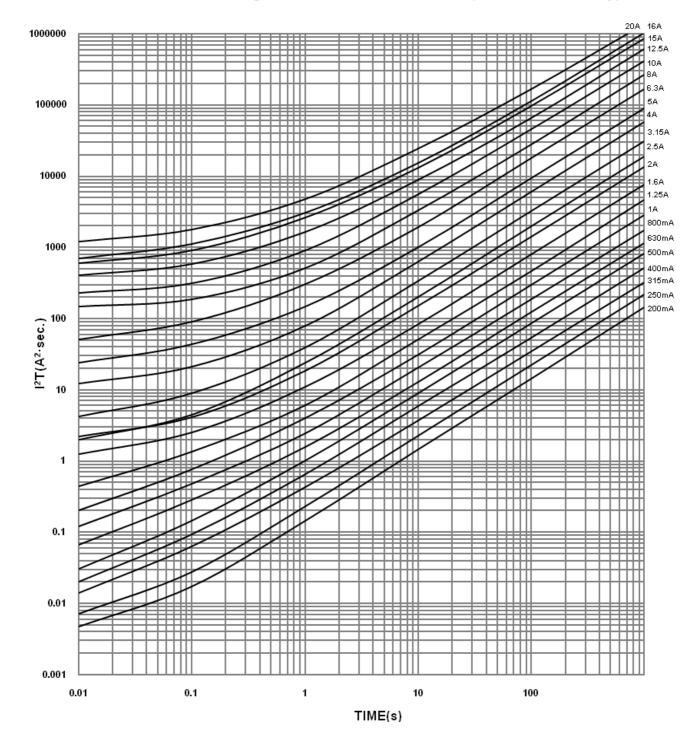
50CF RoHS SERIES

ISSUED DATE: REV. NO.: DOC. NO.: PAGE:

2019/10/31 A08 HLD-PSI-8070 Page 5 of 9

5.6 平均 I²T-T 特性曲线图(仅供参考)/ THE AVERAGE I²T-T CHARACTERISTICS CURVE(FOR REFERENCE ONLY)

50CF RoHS Average I2T-T Characteristics Curve(For Reference Only)





PRODUCT SPECIFICATION

50CF RoHS SERIES

ISSUED DATE: REV. NO.: DOC. NO.: PAGE: 2019/10/31 A08 HLD-PSI-8070 Page 6 of 9

5.7 电阻测试/ COLD RESISTANCE TEST

环境温度为 25 ± 2 , 测试电流不大于保险丝额定电流的 10%。

Input 10% of fuse rated current to fuse for cold resistance test at surrounding temperature of 25 ± 2 .

6 产品标志/MARKING

6.1 保险丝上的标志应易于看清。

The relevant markings shall be marked on the caps of the fuse and shall be easily visible.

6.2 每个保险丝应标有下列标记。

The markings for every fuse shall be prescribed as below according to the types.

- 3) 商标/ Trademark: (日)
- 4) 特性符号/ Characteristic Symbol: F
- 5) 额定电流/Rated Current
- 6) 分断能力符号/ Breaking Capacity Symbol: H
- 7) 额定电压/ Rated Voltage

注:1)、2) 和 3)应标注在保险丝管一端铜帽的侧面。

Note: 1), 2) and 3) should be marked on the one side cap of the fuse.

- 4)、5)、6) 和 7)应标注在保险丝管另一端铜帽的侧面。
- 4), 5), 6) and 7) should be marked on the other side cap of the fuse.

7 包装要求/ PACKING DETAILS

- 7.1 外箱包装方式/ EXTERNAL CARTON PACKING
 - 7.1.1 包装方式 A/ PACKING MODE A
 - 7.1.1.1 参考尺寸:长×宽×高=320×240×165mm。

Reference Dimension: Length \times Width \times Height = 320 \times 240 \times 165mm.

7.1.1.2 包装细节: 200EA/小塑料袋; 25 小塑料袋/大塑料袋; 2 大塑料袋/每箱。

Packing Details: 200EA/ little plastic-bag; 25 little plastic-bags/ big plastic-bag; 2 big plastic-bags/ External Carton.

7.1.2 包装方式 B/ PACKING MODE B

7.1.2.1 参考尺寸:长×宽×高=375×245×165mm。

Reference Dimension: Length \times Width \times Height = 375 \times 245 \times 165mm.

7.1.2.2 包装细节: 200EA/小塑料袋; 5 小塑料袋/盒; 10 盒/每箱。

Packaging Details: 200EA/ little plastic-bag; 5 little plastic-bags/ box; 10 boxes/ External Carton.

产品的包装应能达到防潮、抗振的作用,以防在运输或贮存过程中产品受潮或损坏。

Packing shall be so carried out that the products will not absorb moisture or be damaged during transportation or storage.

7.2 标签/ LABEL

标签应包括型号、额定电流、额定电压、额定分断电流、商标、安全标志、批量号码、公司名称、RoHS标志、绿色"G"、绿色"e"(仅无铅产品)和"QA"标志。

The label in the smallest package in which the fuses are put shall contain the Type, Rated current, Rated voltage, Breaking current, Trademark, Safety approval logo, Lot. No., Company name, "RoHS" mark, green "G", green "e" (only Pb free products) and "QA" mark.

例批量号:





PRODUCT SPECIFICATION

50CF RoHS SERIES

ISSUED DATE: REV. NO.: DOC. NO.: PAGE:

2019/10/31 A08 HLD-PSI-8070 Page 7 of 9

8 环境参数/ ENVIRONMENT PARAMETERS

- 8.1 工作温度/ Operating Temperature: -55 ~ 125 .
- 8.2 储存温度/ Storage Temperature: -55 ~85 .

9 信赖性试验/ RELIABILITY TEST

项目/ Item	试验要求/ Test Requirement	试验条件/ Test Condition
高温试验 High Temperature Test	试验后保险丝管的电阻符合范围;电气特性符合:210%30分、150%1/50%1 小时。 After high temperature test, the resistance value of the fuses shall be in range. Electrical Characteristics:210%30minutes, 150%1 hour.	测试温度:105±2 ,测试时间:1000 小时。 Test Temperature: 105±2 , Test Time: 1000hours.
低温试验 Low Temperature Test	试验后保险丝管的电阻符合范围;电气特性符合:210%30分、150%1 小时。 After low temperature test, the resistance value of the fuses shall be in range. Electrical Characteristics:210%30 minutes, 150%1 hour.	测试温度:-20±2 ,测试时间:1000 小时。 Test Temperature: -20±2 , Test Time: 1000hours.
高湿试验 High Humidity Test	试验后保险丝管的电阻符合范围;电气特性符合:210%30分、150%1 小时。 After high humidity test, the resistance value of the fuses shall be in range. Electrical Characteristics: 210%30minutes, 150%1 hour.	测试温度:40 ± 2 ,测试湿度: 90%~95%,测试时间:96 小时。 Test Temperature: 40 ± 2 , Test Humidity: 90%~95%, Test Time: 96hours.
热冲击试验 Thermal Shock Test	试验后保险丝管的电阻符合范围;电气特性符合:210%30分、150%1 小时。 After thermal shock test, the resistance value of the fuses shall be in range. Electrical Characteristics: 210%30minutes, 150%1 hour.	每个循环:-40 放置 30 分钟后再 85 放置 30 分钟,测试 10 循环。 -40 / 30minutes 85 / 30minutes, 10 cycles.
落下、冲击试验 Falling Shock Test	铜帽应固定牢固,以保证在未损坏熔断体时,铜帽不能被卸下。铜帽表面镀层应牢固不易脱落,每个端帽应能经受专用的设备外加的轴向拉力 10N,保持 1 分钟。陶瓷管必须无缺陷破裂和缺损。试验后保险丝管的电阻符合范围;电气特性符合:210% 30 分、150% 1 小时。 Cap should be firmly attached so that it is not possible to remove them without damaging the fuse itself. The means of attachment shall be sufficient to withstand an axial pull of 10N applied to each cap for 1 minute. The cap shall be nickel plated firmly. The ceramic tube shall have no defects such as crack and injury. After falling shock test, the resistance value of the fuses shall be in range. Electrical Characteristics: 210% 30minutes, 150% 1hour.	一箱 10,000 个保险丝管从一米高自由落下,跌落 20 次。 10,000EA fuses/ one external carton, Falling height: 1 meter, Falling times: 20.



PRODUCT SPECIFICATION

50CF RoHS SERIES

ISSUED DATE: REV. NO.:

DOC. NO.:

2019/10/31 A08 HLD-PSI-8070

PAGE: Page 8 of 9

包装方式 A Package A

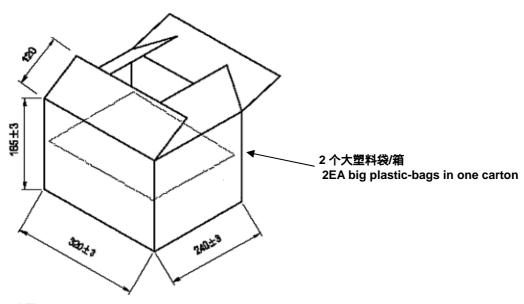
大塑料袋 Big-Plastic-Bag



200 个/小塑料袋;25 小塑料袋/大塑料袋 _ 200EA/ little plastic-bag; 25 little plastic-bags/ big plastic-bag 5,000 个/大塑料袋

5,000EA/ big plastic-bag

外箱 External Carton



1 重量 Weight

一个外箱(装满 10,000 个保险丝管)毛重 13 公斤/净重 12.5 公斤。

One external carton(filled with 10,000EA fuses): G.W. 13Kgs/ N.W. 12.5Kgs.

2 原材料 Material

内盒 Inner box: 纸板 Cardboard.

外箱 External carton: 双层瓦楞纸 Double layer corrugated paper, 厚度 Thickness>6mm.

3 印刷标志 Printing and Marking

外箱需有公司名称、电话、传真、电子邮箱、网址、商标、安全标志、RoHS、BSI ISO9001 和 CQC ISO14001:2004 等标志。

External carton With Company name, Tel, Fax, E-mail, Web site, Trade make, Safety approval logo, RoHS, BSI ISO9001 and CQC ISO14001:2004 registered firm etc..



PRODUCT SPECIFICATION

50CF RoHS SERIES

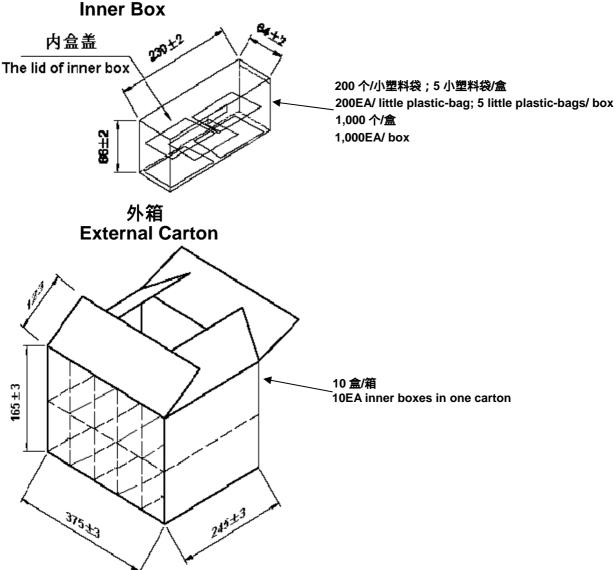
ISSUED DATE: REV. NO.:

> DOC. NO.: PAGE:

2019/10/31 A08 HLD-PSI-8070 Page 9 of 9

包装方式 B Package B

内盒 Inner Box



1 重量 Weight

一个外箱(装满 10,000 个保险丝管)毛重 13.5 公斤/净重 12.5 公斤。

One external carton(filled with 10,000EA fuses): G.W. 13.5Kgs/ N.W. 12.5Kgs.

2 原材料 Material

内盒 Inner box: 纸板 Cardboard.

外箱 External carton: 双层瓦楞纸 Double layer corrugated paper, 厚度 Thickness>6mm.

3 印刷标志 Printing and Marking

外箱需有公司名称、电话、传真、电子邮箱、网址、商标、安全标志、RoHS、BSI ISO9001 和 CQC ISO14001:2004等标志。

External carton With Company name, Tel, Fax, E-mail, Web site, Trade make, Safety approval logo, RoHS, BSI ISO9001 and CQC ISO14001:2004 registered firm etc..

单击下面可查看定价,库存,交付和生命周期等信息

>>HOLLY(好利来)