



深圳市业展电子有限公司

承认书

SPECIFICATION FOR APPROVAL

客户名称

Customer Name _____

客户料号

Customer P/N _____

产品名称

Product Name

Current Sensing Resistors – YSR Series

产品规格

Product Type

Y125-10-2J

申请承认日期

版本

Apply Date

2019-07-03

REV. _____

供货商属性 代理商

制造商 深圳市业展电子有限公司

Vendor Type Agency

Manufacturer

Note: 禁止使用 1 级环境管理物质.遵守 ACBEL"环境管理物质规范"中所要求之含量标准.

Restrict use of hazardous substances of level 1; Comply with "Specification for Hazardous Substances and Materials Management" of ACBEL

| 供货商印鉴 Vendor Stamp | APPROVED | CHECKED | PREPARED | 承认印鉴 Stamp |
|-----------------------|----------|---------|----------|---------------|
| | | | 邓小辉 | |

Mainland China: 深圳市业展电子有限公司

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| | | |
|--|----------|--------|
| 标准书名 Classification 承认书 Specification | Spec No. | YZ.YSR |
| 品名：压脚型采样电阻器 YSR Series Product Name: Current Sensing Resistor | Version | 1.5 |
| | Page | 5-1 |

1. 一般事项 General

1.1 适用范围 Scope

本承认书适用于深圳市业展电子有限公司 制造之[压脚型采样电阻器]。
This specification is available for Current Sensing Resistor (Shunt Resistor) manufactured by Shenzhen Yezhan Electronics Co., Ltd.

1.2 品质 Quality

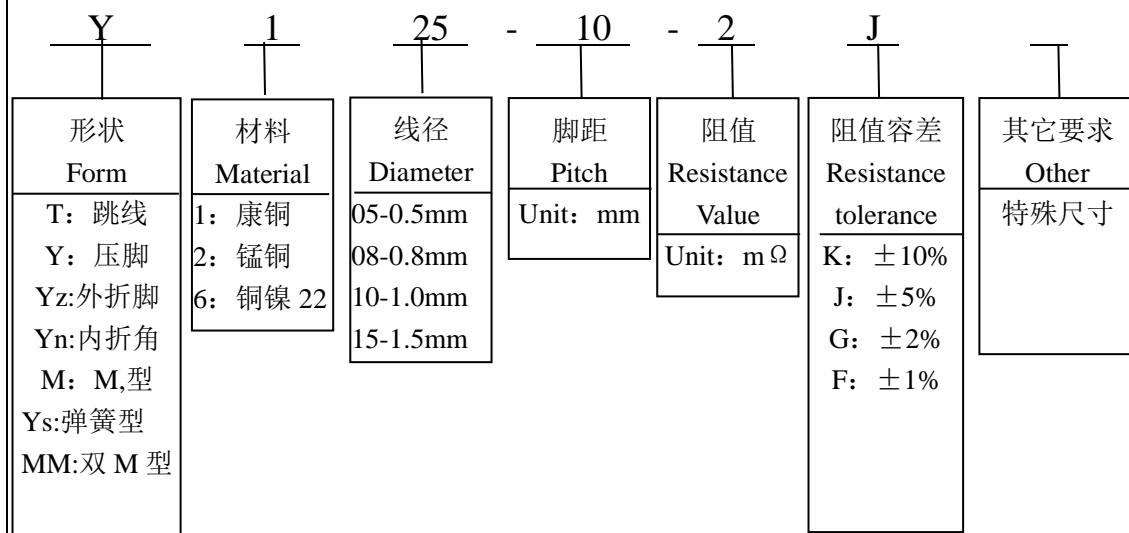
本电阻器的制造系经高质量管理程序，并具有高信赖性的质量保证，且符合 RoHS 和无卤要求。
The resistor is manufactured by highly quality-controlled process and guaranteed high reliability, it meets RoHS & Halogen-Free requirement.

1.3 标准试验状态 Standard measuring conditions

温度 20±2℃、湿度 65±5%。
但在温度 5~35℃、湿度 45~85%之情况下，仍可给予判定。
Temperature 20±2℃, Humidity 65±5%.
Being no doubt about the judgment, measurements can be made within the following Temperature 5~35℃, Humidity 45~85%.

1.4 形名 (例) Type designation (example)

依使用种类、线径、脚距、形状、公称电阻值、电阻值容许差而区别，其构造如下：
The type designation shall be in the following form and as specified.

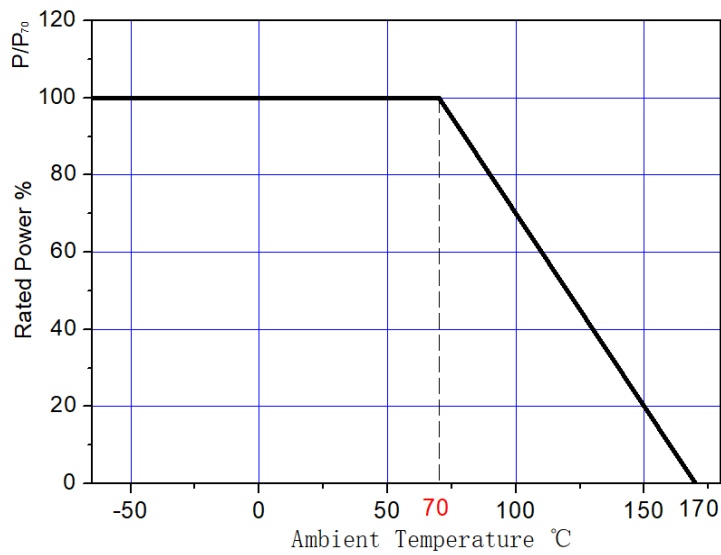


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| 品名 : 压脚型采样电阻器 YSR Series | Version | 1.5 |
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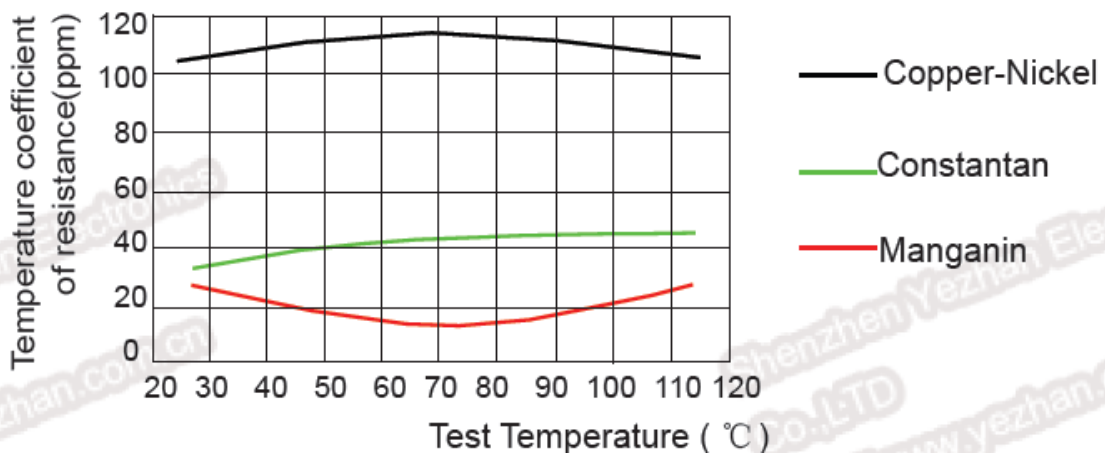
1.5 材质 Material

| 代号 Symbol | 材料 Material | 成分 Components | 电阻率 Resistance rate |
|--------------|-------------------------------|--------------------------------|--------------------------------|
| 1 | 康铜 Constantan wire | Cu 57-59%, Ni 40-42%, Mn 1% | 48 $\mu\Omega \cdot \text{cm}$ |
| 2 | 锰铜 Manganin wire | Cu 85%, Mn 12%, Ni 3% | 44 $\mu\Omega \cdot \text{cm}$ |
| 6 | 铜镍22 Copper-Nickel wire | Cu 77%, Ni 23% | 30 $\mu\Omega \cdot \text{cm}$ |

1.6 功率曲线 Power Derating



1.7 温度系数曲线 TCR Derating



| | | |
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1.8 外形 External

| 项 目 | 参 数 |
|---------|--|
| 材 料 | 直径 2.5mm±0.1mm 康铜丝 |
| 图 解 | <p>The diagram shows a top-down view of a current sensing resistor. It consists of a central rectangular loop with rounded corners. The width of the loop is labeled 'W'. The height of the loop is labeled 'H'. The thickness of the wire is labeled 'L'. The distance between the two vertical legs of the loop is labeled 'C'. A 'Test point' is indicated on the left leg. The distance from the center of the loop to the center of the test point is labeled 'P'. A side view of the resistor is shown to the right, illustrating its profile.</p> |
| A (脚长) | 3.0mm±0.5mm |
| H (标高) | 7mm±2mm |
| P (压脚) | 1.5mm±0.2mm |
| W (跨距) | 10mm±0.5mm |
| C (打扁度) | 3.1mm±0.2mm |
| L (线径) | 2.5mm±0.1mm |
| 阻 值 | 2mΩ±5% |
| 通过电流 | 20A |
| 使用温度 | -65℃~170℃ |

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| 项目 Item | 规格值 Performance | 试验方法 Test methods | |
| 短时间过负荷 Short time overload | ±1%以内。 不得有机械损伤。 within ±1% No evidence of mechanical damage. | 额定功率 X 5 倍 ,5 秒。 Rated power X 5 times, 5s | |
| 端子强度 Terminal strength | 不得有机械损伤。 No evidence of mechanical damage. | 线径 1.0mm 以上 5kg/10sec.. 线径 0.8mm 以下 2kg/10sec. Wire dimension over 1.0mm 5kg/10sec. Wire dimension below 0.8mm 2kg/10sec. | |
| 焊锡耐热性 Resistance to soldering heat | ±0.5%以内。 不得有机械的损伤。 within ±0.5% No evidence of mechanical damage. | 350±10℃, 3.5±0.5 秒 ,试验后放置 3 小时。 350±10℃, 3.5±0.5s After test leave for 3h. | |
| 焊锡附着性 Solderability | 导线至少 95%以上新锡覆盖。 Covered with new solder by 95% at least. | 焊锡温度: 245±5℃。 浸锡时间: 3±0.5 秒。 Test temperature of solder: 245±5℃ Dipping time in solder: 3±0.5s | |
| 温度循环 Temperature cycle | ±1%以内。 不得有机械的损伤。 within ±1% No evidence of mechanical damage. | 低温侧-40±3℃/30 分, 室温 10~15 分钟 高温侧 200±2℃/30 分, 室温 10~15 分钟 5 回 Low side : -40±3℃/30min, Room temp.: 10 to 15min High side : 200±2℃/30min, Room temp.: 10 to 15min 5 cycles | |
| 耐湿负荷寿命 Load life in humidity | ±0.5%以内。 within ±0.5% | 40±2℃, 湿度 90~95%, 1000 小时 定格电压(90 分钟 ON, 30 分钟 OFF) 40±2℃, 90 to 95%RH, 1000h Rated voltage (90 min ON, 30 min OFF) | |
| 负荷寿命 Load life | ±1%以内。 within ±1% | 70±2℃, 1000 小时 定格电压(90 分钟 ON, 30 分钟 OFF) 70±2℃, 1000h Rated voltage (90 min ON, 30 min OFF) | |