



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

Y125-20-4J

申请承认日期

Apply Date

2020-07-07

版本

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
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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

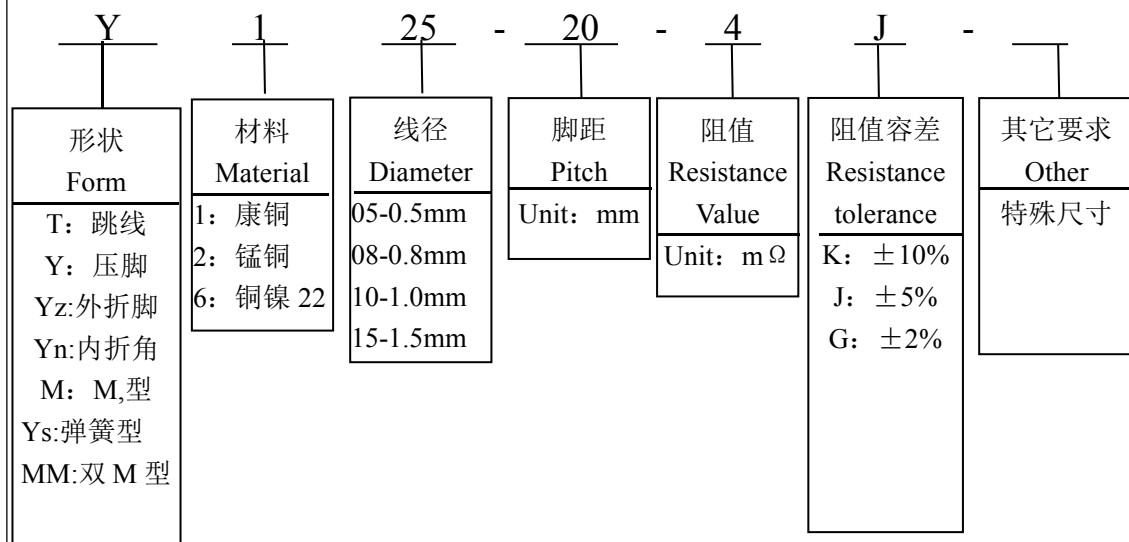
本电阻器的制造系经高质量管理程序，并具有高信赖性的质量保证，且符合 RoHS 和无卤要求。
The resistor is manufactured by highly quality-controlled process and guaranteed high reliability, it meets RoHS & Halogen-Free requirement.

1.3 标准试验状态 Standard measuring conditions

温度 $20 \pm 2^\circ\text{C}$ 、湿度 $65 \pm 5\%$ 。
但在温度 $5 \sim 35^\circ\text{C}$ 、湿度 $45 \sim 85\%$ 之情况下，仍可给予判定。
Temperature $20 \pm 2^\circ\text{C}$, Humidity $65 \pm 5\%$.
Being no doubt about the judgment, measurements can be made within the following Temperature $5 \sim 35^\circ\text{C}$, Humidity $45 \sim 85\%$.

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.

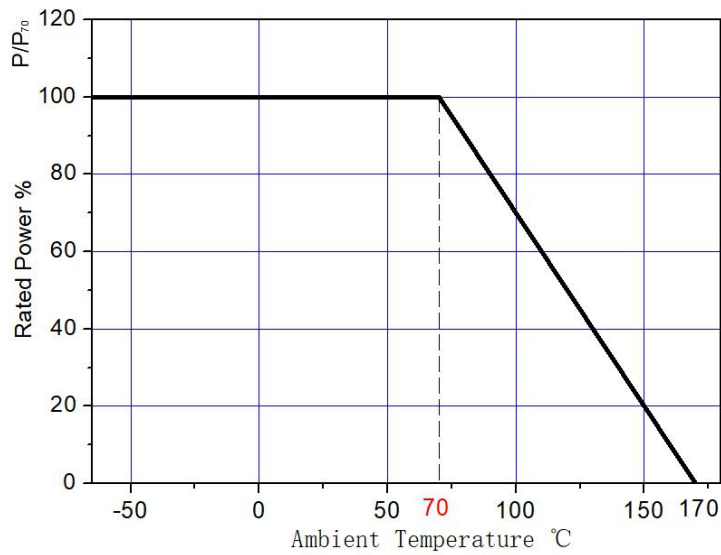


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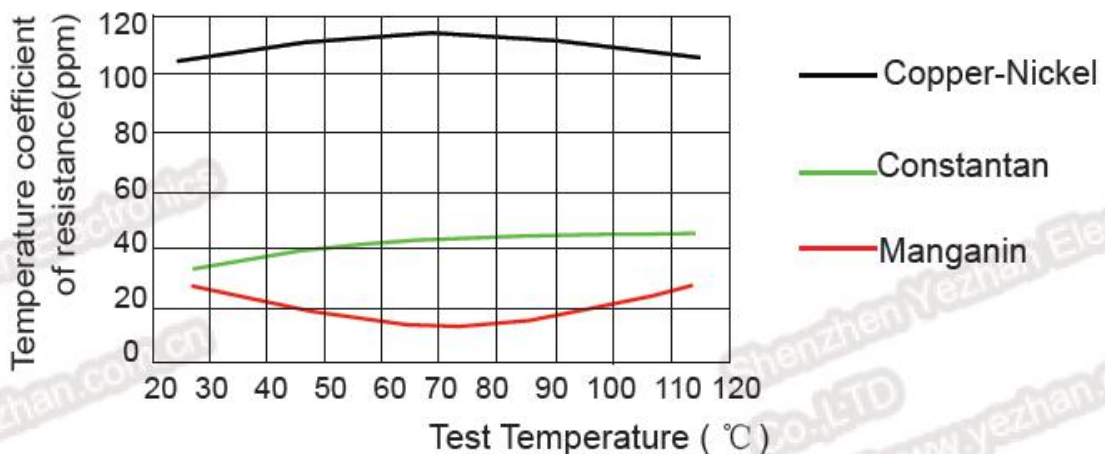
1.5 材质 Material

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	镍铜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 $2.5\text{mm} \pm 0.1\text{mm}$ 康铜丝
图 解	<p>The diagram illustrates the physical dimensions of the current sensing resistor. It features a central sensing element with two leads. Key dimensions are labeled: L (wire diameter), H (total height), P (lead height), W (lead spacing), C (flattening width), and a 'Test point' on the sensing element. A side view shows the resistor's profile with a central sensing region.</p>
A (脚长)	$4.0\text{mm} \pm 0.2\text{mm}$
H (标高)	$12.6\text{mm} \pm 2\text{mm}$
P (压脚)	$1.5\text{mm} \pm 0.2\text{mm}$
W (跨距)	$20\text{mm} \pm 0.3\text{mm}$
C (打扁度)	$3.1\text{mm} \pm 0.2\text{mm}$
L (线径)	$2.5\text{mm} \pm 0.1\text{mm}$
阻 值	$4\text{m}\Omega \pm 5\%$
通过电流	20A
使用温度	$-65^{\circ}\text{C} \sim 170^{\circ}\text{C}$

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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	±0.5%以内。 不得有机械损伤。 within ±0.5% 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.	260±5℃, 10±1 秒 , 试验后放置 3 小时。 260±5℃, 10±1s 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: 5±0.5 秒。 Test temperature of solder: 245±5℃ Dipping time in solder: 5±0.5s	
温度循环 Temperature cycle	±0.5%以内。 不得有机械的损伤。 within ±0.5% No evidence of mechanical damage.	-55℃~+125℃, 1000 循环 1000 Cycles (-55℃~+125℃)	
耐湿负荷寿命 Load life in humidity	±0.5%以内。 within ±0.5%	在 85℃/85%RH 环境条件, 10%功率加载运行 1000hrs 1000hrs 85℃/85%RH, Note: Specified condition 10% of operating power	
负荷寿命 Load life	±0.5%以内。 within ±0.5%	在 125℃环境条件, 额定功率加载运行 1000hrs Condition D Steady State TA=125℃ at rated power	