铝 壳 电 阻 外 观 标

APPEARANCE STANDARD OF C

1．主体 MAIN BODY

a.印字面 Printing Words appearance

所喷印的功率、阻值、误差率、徽号等字体，必须端止及清晰

SPRAY PRINTING WORDS WITH POWER、RESISTANCE、ERROR RATE、LOGO ECT, MUST BE NEAT AND CLEAR.

b.外观部分 APPEARANCE PART

产品外壳为金属铝壳材质，表面光滑，无破损、致命缺损、开裂、变形和明显色差

MATERIAL OF OUT SHELL IS STEATITE CERAMIC, SMOOTH SURFACE, WITHOUT DAMAGE、BROKEN、CRACK、DEFORMATION AND OBVIOUS CHROMATISM.

c.浆面标准 SIZING THICK LIQUID SURFACE STANDARD

浆面平整，无严重针孔、开裂现象。浆面高度不高于金属铝壳平面或低于金属铝壳平面 1MM, 用胶尺铲刮浆面，浆面不易脱落

SIZING THICK LIQUID SURFACE SHOULD BE LEVEL OFF, WITHOUT SERIOUS PINHOLES、CRACKS. LENGTH OF THICK LIQUID SURFACE SHOULD BE LESS THAN CERAMIC SHELL SURFACE OR LOWER THAN CERAMIC SHELL SURFACE WITH 1MM, SHOVELED AND STRICKLED BY GLUE RULER, SURFACE WILL NOT FALL OFF EASILY.

d.产品尺寸请参考附加图纸（第六页）PRODUCTS DIMENSIONS REFER TO ADD DRAWING (Page 6)

2．引脚（端子） DOWN-LEAD (terminal)

a.线材 MATERIAL OF LINES

镀锡铜脚或铁脚（视贵司要求采用）线材无明显氧化现象

MATERIAL OF TINNED COPPER LINES OR CP LINES (ACCORDING TO YOUR COMPANY REQUEST) HAVE NO OBVIOUS OXIDATION APPEARANCE.

b.两端出线长度 LENGTH OF TWO-TERMINAL OUT LINE

接线端位置两端长短±不多于 1.5MM

LENGTH OF TWO-TERMINAL SHOULD BE NOT MORE THAN ±1.5MM

技 术 参 数

TECHNICAL PARAMETER

1. 额定电压(RATED VOLTAGE)

额定电压是在额定电力下直流电和交流电相互对应所产生的电压

额定电压=$\sqrt{\text{额定电力（}W\text{）*电阻值（ Ω ）}}$

依公式求出超越最大连续使用电压时,以最大连续使用电压为额定电压

RATED VOLTAGE MEANS THE VOLTAGE RESTRICTED BY VARIOUS DIRECT CURRENT OR ALTERNATING CURRENT UNDER THE RATED POWER.

FORMULA U= $\sqrt{P*R}$

U: RATED VOLTAGE (V)

P: RATED POWER (W)

R:NOMINAL RESISTANCE(Ω)

2. 端子浸锡性（TERMINAL SOLDER ABILITY）

将端子前端 7 mm 处浸入溶剂 5-10 秒,并调整焊锡温度到 230±5℃,然后溶解溶剂,使溶液完全燃烧,再拭去端子上的溶剂残渣,再将端子前端 5mm 处浸入溶剂 3±0.5 秒,然后拿出使其自然冷却 25.4±6.4 秒后,再将溶剂洗去,经上述步骤后,导线需符合下列情形：

(a)端子必须至少 95％以上焊著,且表面清洁光滑.

(b)端子孔不必集中一处,但总面积亦不可超过 10%

DIP THE TERMINAL WITHIN 7mm FROM THE EDGE INTO FLUX FOR 5 TO 10 SECONDS, THEN ADJUST THE SOLDERING TEMPER ATURE TO 230 ± 5 ℃ ,WIPE THE SOLDERING DREGS AND BURNED FLUX FROM THE MELTED SOLDER, NEXT DIP THE TERMINAL5mm FOR THE EDGE, DIP TIME 3 ± 0.5 SECONDS.THEN PULL IT OUT WITHIN 25.4 ± 6.4 SECONDS,COOL IT IN AIR THEN WASH THE FLUX AWAY.THE LEAD WIRE SHOULD MEET FOLLOWING CONDITIONS AFTER REMOVE THE FLUX.

(a)TERMINALSHOULD BE NEW SMOOTH WITH 95% SOLDERING AT LEAST.

(b)PIN HOLE NEEDS NOT TO CONCENTRATE IN ONE PLACE, BUT THE TOTAL AREA SHOULD NOT OVER10%.

3． 温度系数（参照表 3-1）TEMPERATURE RESISTANCE（PLEASE REFER TO TABLE5-1）

将电阻置入每一试验温度下约 30~45 分钟测定之，然后使用下列公式计算温度系数，各阶段试验的温度系数应在±260PPM 以内.

$$\text{温度系数} = \frac{R - R_0}{R_0} \times \frac{1}{T - T_0} \times 10^6 \text{（PPM/℃）}$$

R：试验后Ω值　　T：试验温度（℃）　　R0：试验前Ω值　　T0：室温（℃）

KEEP THE RESISTOR IN THE EVERY STAGE TEMPERATURE AROUND 30 TO 40 MIN.BY USING THE FORMULA BELOW.

AND ALSO THE TEMP.RESISE ANCE COEFFICIENT WILL BE CALCULATED.

*TEMPERATURE RESISTANCE COEFFICIENT

$=(R- R_0/R_0) \times(1/T-T_0) \times 10^6$（PPM/℃）

R_0:RESISTANCE(Ω)IN BASE TEMP.(2nd STAGE)

R: RESISTANCE IN EVERY TESTING TEMP.STAGE.

T_0: BASE TEMP. (2nd STAGE)

T:TESTING TEMP（℃）

THE TEMP.COEFFICIENT SHOULD BE WITHIN ±260℃ PPM IN ALL STAGES.

表 3-1(Table3-1)　　单位: ℃

第 1 阶段 1st	第 2 阶段 2nd	第 3 阶段 3rd	第 4 阶段 4th	第 5 阶段 5th
-30±2	25±2	65±2	105±2	180±2

4． 短时间超负荷（TRANSIENT OVERLOAD）

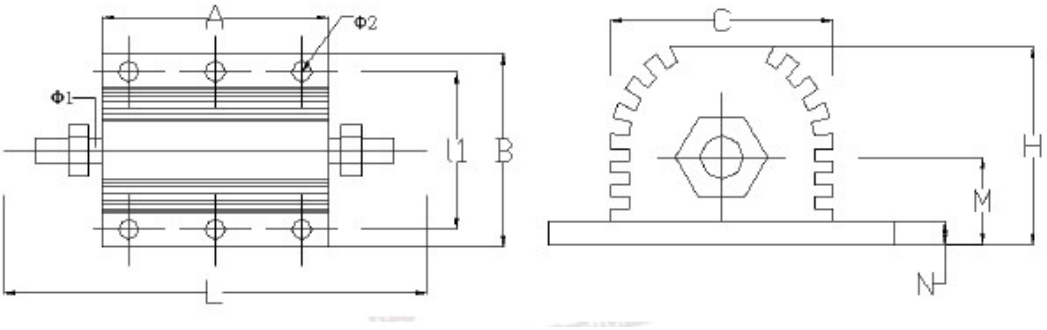
加十倍的额定电力（W）于电阻器 5 秒钟，不生火焰或烧焦等现象。

回复常温 30 分钟后，其阻值变化率应在 2%±0.05Ω以内。

APPLY VOLTAGE TEN TIMES OVER RATED POWER FOR FIVE SECONDS, NO CHANGE IN MECHANICAL APPEARANCE. THEN PUT IN NORMAL TEMPERATURE CONDITION FOR 30 MIN. THE VARIANCE OF VALUE SHOULD BE WITHIN (2%±0.05Ω).

铝壳电阻系列

Cement Resistors Series

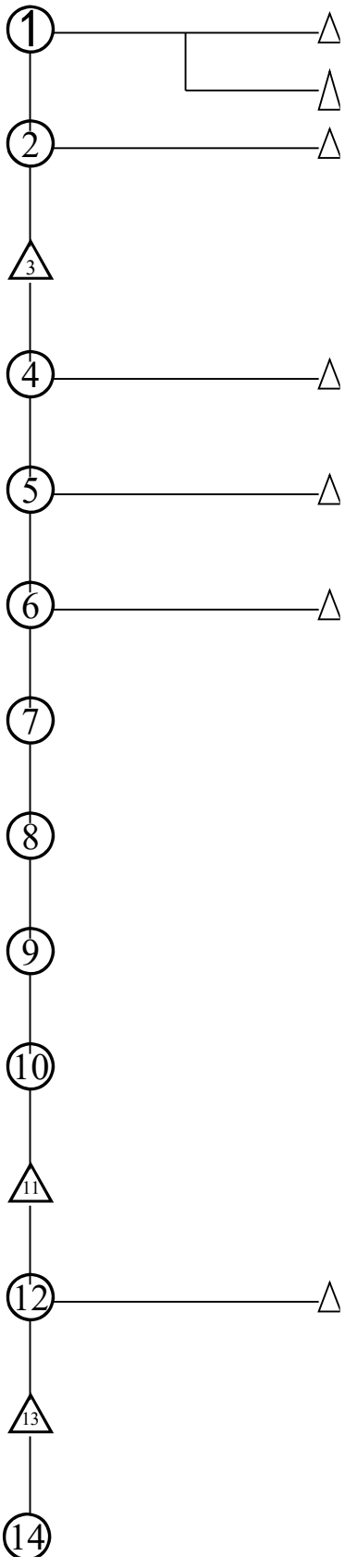


■ 规格尺寸 Specifications and Dimensions

规格型号 MODEL NO	尺寸 DIMENIONS (mm)							
	A±1	B±0.5	L±1	I(孔距，两个孔)	H±0.5	I1±0.5	Φ1±0.2	Φ2±0.3
RX24-100W	98	48	130	35	26	37	4	5

设计制作 Designed　　审　核 Checked　　批　准 Approval

生产流程图 Producing



1. 白棒压帽 （White bars packing with caps）

2. 白棒绕线 (White bars coiling wire)

3. 电阻值检验（半成品） (Semi-finished products inspection)

4. 喷印 (Jet Printing)

5. 装铝壳 (Resistance combined ceramic shell)

6. 石英砂灌入 (Filling cement)

7. 阴干 (Air-dry)

8. 烤箱烘烤 (Baking)

9. 切脚（M 型） (Cutting off pins)

10. 电阻值检验（产品全检） (100% resistance inspection)

11. 外观检查 (Appearance inspection)

12. 包装 (Packing)

13. 储存 (Storing)

14. 出货 (Delivery)