

RX24 金色铝外壳电阻器 Golden Aluminum Housed Fixed Power Resistor	文件编号 Document No.	YF-SE-02-24/A00
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■ **产品特性 Feature:**

- 高负荷、散热特性、不燃性;
High load, heat-sink performance, non-flame ;
- 高频特性好、抗脉冲性;
Stable performance of high voltage, pulsing load;
- 符合环保要求 RoHS compliant, halogen free, lead free;
- 防护等级 INGRESS PROTECTION: IP53;

■ **产品引用范围 Application**

- 家电/音响系统 Entertainment system;
- 电源系统/充电设备 Power supply;
- 工业/自动化行业 Industrial/automation system;
- 变频控制/数控设备 VFD control/CNC equipment;
- 新能源设备 New Energy control systems

■ **产品订货方式 Parts Number Explanation**

RX24	-	50W	-	100R	-	J	-		
类型		功率		特性(可选)		阻值		误差	
Product Type		Rated Power		Feature (Optional)		Resistance		Tolerance	
								包装方式	
								Packing	
		10W		N/A:Normal		0R47=0.47Ω		F:±1%	Requirements
		25W		S:Small volume		2R7=2.7Ω		G:±2%	
		50W		N:Non-inductive		15R=15Ω		J:±5%	
		75W		...		510R=510Ω		K:±10%	
		...				1K2=1.2KΩ			
		500W				75K=75KΩ			

■ **环保申明 RoHS declaration**

本产品符合 RoHS 2.0(2011/65/EU)环保要求。
The products meet the standards of RoHS 2.0(2011/65/EU).

■ **参考标准 Reliability standard**

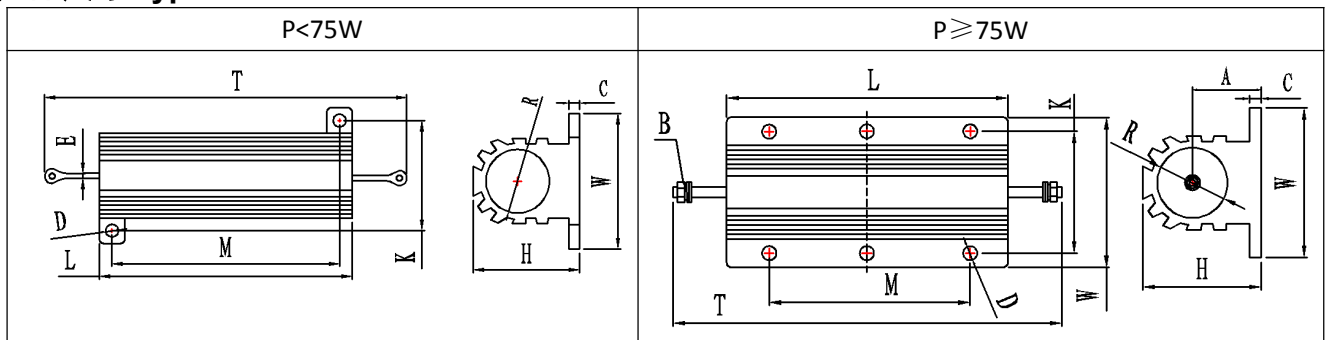
可焊性 Weldability Standard:	IEC60068-2-20
环境标准 Environment Standard:	SJ/T 11363-2006, ROHS 2011/65/EU
检验标准 QC standard:	MIL-STD-105E, GB/T 2828.1-2003
产品性能 Performance:	IEC60115-2008, GB/T5729-2003

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■ 标准产品规格 Standard voltage parameters

功率 Rated Power At 70°C	阻值 Resistance (Ω)	最高使用电压 Max. Rating Voltage(U _R)	最高超载电压 Max. Overload Voltage(U _L)	绝缘电压 Insulation Voltage(U _N)	温度系数 T.C.R. PPM/°C	工作温度 Operating Temperature
5W	0.1~500K	150V	250V	1000V	T20: ±20 T50: ±50 T100: ±100 T200: ±200 T350: ±350 T500: ±500	-55°C ~ +275°C
10W	0.1~500K	150V	250V	1000V		
25W	0.1~500K	250V	350V	1000V		
50W	0.1~500K	250V	500V	1500V		
75W	0.1~100K	350V	500V	1500V		
100W	0.1~100K	350V	750V	1500V		
150W	0.1~10K	500V	750V	2000V		
200W	0.1~10K	500V	1000V	2000V		
300W	0.1~10K	650V	1000V	2000V		

■ 产品尺寸 Type dimension



规格 Type	尺寸 Dimension(mm)								
	L ± 1.0	W ± 0.5	H ± 0.5	M ± 1.0	K ± 1.0	D ± 0.5	T-max	C ± 0.5	B ± 0.5
5W	15.5	16	8.5	11.4	12.5	2.0*2	-	1.5	-
10W	20	21	10	14	16	2.5*2	-	2	-
25W	27	27	14	18.5	20	2.5*2	50	2	-
50W	50	29	15.5	40	22	3.5*2	73	2	-
75W	66	48	26	47	37	4.5*4	100	4.5	M4
100W	98	48	26	70	37	4.5*6	135	4.5	M4
150W	130	48	26	104	37	4.5*6	170	4.5	M4
200W	155	48	26	70	37	4.5*6	195	4.5	M4
200WS	92	73	45	70	58	5.5*6	150	5	M6
250W	112	73	45	90	58	5.5*6	170	5	M6
300W	130	73	45	102	58	5.5*6	185	5	M6
500W	204	73	45	174	58	5.5*6	260	5	M6

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■ **产品特性 Product performance**

● **额定功率补充说明 Rating power:**

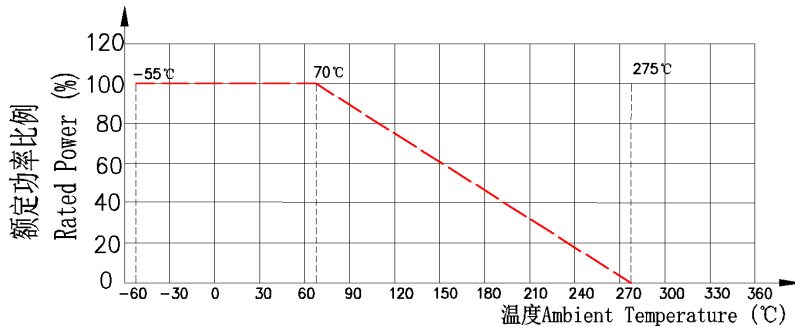
RX24 型的金色铝外壳电阻器的功率，为环境为 25℃，配套散热片的工作条件时的产品额定功率。如果不配套散热片，电阻功率需要降负荷使用。

The rating power is the power value at 25℃ and with heat-sink.If the using environment is without the heat-sink, the power value need to be reduced.

● **额定功耗 Power Derating Curve:**

额定功率是周围温度 70℃ 以下(推荐工作区域)，可连续使用的负载功率的最大数值，且应使机械性能与电气性能满足。如周围温度超过 70℃ 时,依照下图功率衰减曲线而定。

Rated power is the highest using power under 70℃ and continuous duty. At the same time, the overload power is fit for mechanical properties and electrical properties. When the temperature is over 70℃,the power must be derated in accordance with the curve as below:



● **额定电压 Rating voltage:**

额定功率对应的额定电压,直流(DC)或交流电流(AC),可以采用如下公式计算。当计算的额定电压超过最高使用电压时，则使用最高使用电压为额定电压。

The following equation may be used to determine the DC(Direct Current) or AC(Alternating Current)(RMS, root mean square value) of normal rated power. However, if the result value exceeds the max. using voltage, the max. using voltage is to be used:

$U_P = \sqrt{P \times R}$	U _P : 额定电压 Rating voltage (V) P: 额定功率 Rating Power (W) R: 电阻值 Resistance(Ω)
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■ 产品特性 Product electrical performance

测试项目 Test Item	测试方法 Test Method	测试方法 Procedure	测试标准 Requirements										
端子强度 Terminal robustness	IEC60115-1 4.16	端子加载 20N 拉力, 时间 10 秒; Pressurizing force:20N, 10 seconds	无损伤 No damage										
本体强度 Body robustness	IEC60115-1 4.15	电阻体中间, 加载 10N 的压力, 时间 10 秒 Central part pressurizing force:10N, 10seconds	无损伤 No damage										
耐振性 Vibration	IEC60115-1 4.22	10~55HZ/0.75mm/2H*3	无损伤 No damage										
耐焊锡热 Soldering Heat	IEC60115-1 4.18	350±5℃, 3S±0.5S	△R/R≤±0.5%										
可焊锡性 Solderability	IEC60115-1 4.17	245±5℃, 5±0.5S	≥95%										
温度系数 Temperature coefficient (T.C.R.)	IEC60115-1 4.8	$T.C.R. = \frac{R - R_0}{R_0} \times \frac{1}{T - T_0} \times 10^6 \quad (PPM/^\circ C)$ R ₀ : 常温下(T ₀)的阻值 Resistance at room temperature(T ₀); R: 测试温度(T=T ₀ +100)的阻值 Resistance at T=T ₀ +100;	根据产品额定参数 Refer to Ratings										
短时间过负载 Short Time Overload	IEC60115-1 4.13	Min($\sqrt{5 \times P \times R}$, U _R), 5s	△R/R≤±2.0%										
绝缘耐压 Voltage proof	IEC60115-1 4.7	U _N , 60S, I≤2mA.	△R/R≤±1%										
绝缘阻值 Insulation resistance	IEC60115-1 4.6	DC500V, R>100MΩ	△R/R≤±0.5%										
耐久性 Endurance	IEC60115-1 4.25	Min(U _P , U _R), 1.5H- ON, 0.5H-OFF, 1000H	△R/R≤±5%										
高温存储 High Temp. Exposure	IEC60115-1 4.23	125℃, 80%, 500H	无损伤 No damage										
温度循环 Temperature Cycle	IEC60115-1 4.19	如下循环 Cycle Below: <table border="1" style="margin-left: 20px;"> <tr> <td>温度 Temperature</td> <td>25℃</td> <td>125℃</td> <td>25℃</td> <td>-25℃</td> </tr> <tr> <td>时间 Duration</td> <td>15min</td> <td>15min</td> <td>15min</td> <td>15min</td> </tr> </table> 持续时间 Cycle Time:1000Hrs.	温度 Temperature	25℃	125℃	25℃	-25℃	时间 Duration	15min	15min	15min	15min	无损坏 No damage △R/R≤±0.5%
温度 Temperature	25℃	125℃	25℃	-25℃									
时间 Duration	15min	15min	15min	15min									
不燃特性 Noninflammability	UL94-V0	16*U _P , 5min	无燃烧现象 No flame										