

管状线绕功率电阻器 RX20 tube-style Wire-wound Fixed Power Resistor	文件编号 Document No.	HU-22/A07
	文件日期 Released Date	2018-12-20
	页次 Page:	1/4



■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: IP51;

■产品引用范围 Application:

- 模拟负荷、放电设备 Load moulds;
- 电源系统/充电设备 Power supply systems;
- 工业/自动化行业 Industrial/automation system;
- 汽车电子 Auto systems;

■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

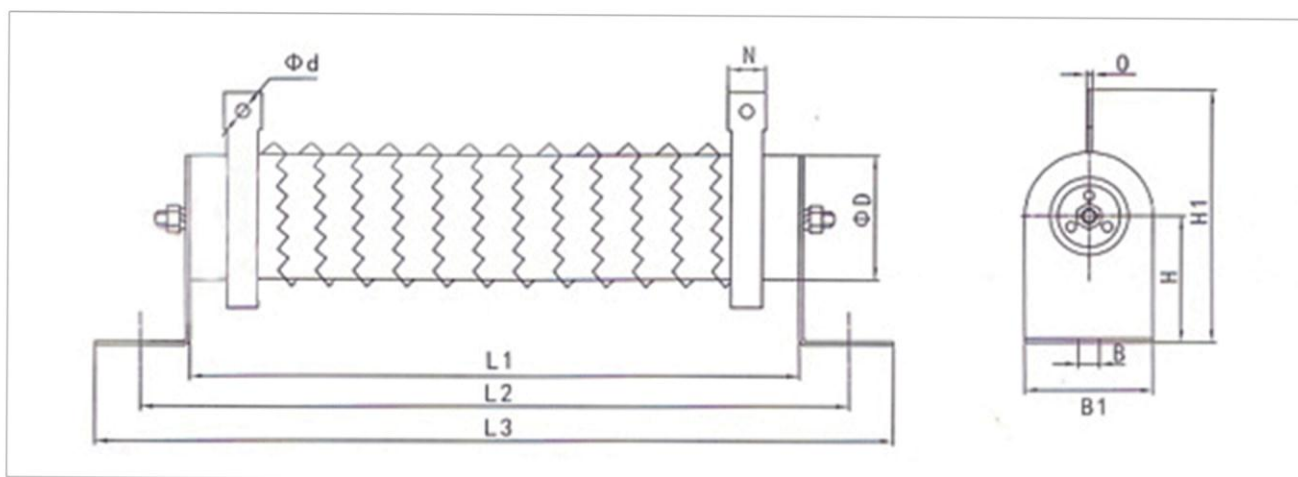
可焊性 Weldability Standard:	IEC60068-2-20
环境标准 Environment Standard:	SJ/T 11363-2006, ROHS 2011/65/EU
检验标准 QC standard:	MIL-STD-105E, GB/T 2828.1-2003
产品性能 Performance:	IEC60115-2008, GB/T5729-2003

管状线绕功率电阻器 RX20 tube-style Wire-wound Fixed Power Resistor	文件编号 Document No.	HU-22/A07
	文件日期 Released Date	2018-12-20
	页次 Page:	2/4

■标准产品规格 Standard electrical specifications:

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
P < 50W	0.1 ~ 1K	350V	500V	1500V	± 100	-55°C
50W ~ 500W	0.1 ~ 2K	500V	650V	2000V	± 250	~
P > 500W	0.1 ~ 5K	650V	1000V	3000V	± 500	+275°C

■产品尺寸 Type dimension:



rated power	Range of resistance (Ω)	Shape size(mm)										Resistance accuracy	Temperature Coefficient
		L1±2	L2±5	L3±3	D±2	B	B1	H±5	H1±5	N	Φd		
300W	0.1-20K	270	287	307	40	7	40	40	80	12	6	±5% (J)	±250ppm
400W	0.1-20K	300	320	340	40	7	40	40	80	12	6		
500W	0.1-50K	300	320	340	50	7	50	45	90	14	6		
600W	0.1-50K	300	320	340	50	7	50	45	90	14	6		
800W	0.1-60K	300	330	355	60	7	60	55	110	16	6		
1000W	0.1-100K	300	330	355	70	8	70	65	130	16	6		
1200W	0.1-100K	360	390	415	70	8	70	65	130	16	6		
1500W	0.1-120K	420	450	470	70	8	70	65	130	16	6		
2000W	0.1-200K	510	540	560	70	8	70	65	130	16	6		
2500W	0.1-200K	510	540	560	70	8	70	65	130	16	6		
3000W	0.1-200K	430	460	500	80	10	80	75	150	16	6		
4000W	0.1-200K	400	440	465	100	10	100	95	190	16	7		
5000W	0.1-200K	500	540	560	100	10	100	95	190	16	7		
6000W	0.1-200K	600	640	660	100	10	100	95	190	16	7		
8000W	0.1-200K	600	690	740	150	11	150	135	270	25	15		
10000W	0.1-200K	600	690	740	150	11	150	135	270	25	15		

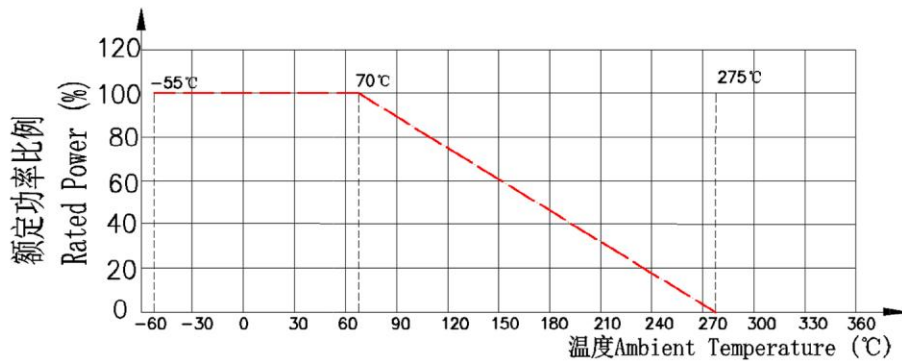
管状线绕功率电阻器 RX20 tube-style Wire-wound Fixed Power Resistor	文件编号 Document No.	HU-22/A07
	文件日期 Released Date	2018-12-20
	页次 Page:	3/4

■产品特性 Product parameter:

●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)
---------------------------	--

管状线绕功率电阻器 RX20 tube-style Wire-wound Fixed Power Resistor	文件编号 Document No.	HU-22/A07
	文件日期 Released Date	2018-12-20
	页次 Page:	4/4

产品特性 Product performance:

Test items	Performance requirements	experimental method
Temperature coefficient of resistor	≤ 250 ($\times 10^{-6}^{\circ}\text{C}$)	$-55^{\circ}\text{C}/+20^{\circ}\text{C}$ $20^{\circ}\text{C}/+125^{\circ}\text{C}$
The strength of the terminal	$\leq \pm$ ($1\%R+0.05\Omega$)	Rally 20N
Withstand voltage	No breakdown	2500V DC 1min
Solderability	The solder can flow freely and wet with the terminals	$235\pm 5^{\circ}\text{C}$ $2\pm 0.5\text{S}$
Heat-resistant soldering	$\leq \pm$ ($1\%R+0.05\Omega$)	$260\pm 5^{\circ}\text{C}$ $10\pm 1\text{S}$
Short-time overload	$\leq \pm$ ($2\%R+0.05\Omega$)	10 times the rated power for 5S
Rapid temperature change	$\leq \pm$ ($1\%R+0.05\Omega$)	$-55^{\circ}\text{C}/+125^{\circ}\text{C}$ Loop 5 times
vibration	$\leq \pm$ ($1\%R+0.05\Omega$)	10-500Hz 98m/s ²
Long-term load	$\leq \pm$ ($2\%R+0.05\Omega$)	$+70\pm 2^{\circ}\text{C}$ VR 1000h
Non-combustibility	Does not burn	1-6 times rated power for 5 minutes
surface temperature	$\leq 350^{\circ}\text{C}$	Applied rated power
Pulse tolerant	$\leq \pm$ ($0.2\%R+0.05\Omega$)	MIL-STD-202 100g 6ms 10 tims
Steady state damp heat	$\leq \pm$ ($2\%R+0.05\Omega$)	$+40\pm 2^{\circ}\text{C}$ humidity 95-98% 240h