

1. PRODUCT

Fusible wire wound resistors

FEATURES

- Advanced alloy wire technology
- Fusible less than 60 seconds when against 25 times power abnormal applied or according to customer's request
- Reliable in pulse / transient / abnormal surge applications
- Non-inductance winding available upon request
- Flame retardant coating

APPLICATIONS

- Safety priority request environment
- Power supply with high reliability
- Power adapters with high reliability
- Components burn-in devices
- Pulse load and in rush current protector
- Medical equipment

2. PART NUMBER:

Part number is identified by the series name, power rating, tolerance, fusing temperature, packing type and resistance value.

Example: 0.5W, 5%, Taping pack, 10 Ω

RRX	15	J	0	T	100
Series	Power	Tol.	TCR	Packing	Resistance

(1) Series name: RRX SERIES

(2) Power Rating: 15=0.5W;

(3) Tolerance: J=±5%;

(4) TCR.: 0=±250ppm°C;

(5) Packaging Type: T=TAPE;

(6) Resistance Value: 100=10Ω;

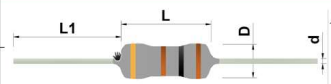
3. MARKING:

Four color code rings designate the resistance value and tolerance in accordance with IEC 60062.

COLOR	1st	2nd	Multiple	tolerance
black	0	0	1	
brown	1	1	10	
red	2	2	10 ²	G(±2.0%)
orange	3	3	10 ³	
yellow	4	4	10 ⁴	
green	5	5	10 ⁵	
blue	6	6	10 ⁶	
purple	7	7		
gray	8	8		
white	9	9		
golden			10 ⁻¹	J(±5.0%)
silver			10 ⁻²	K(±10%)

4. ELECTRICAL CHARACTERISTICS

Type	RRX15		型号
Resistance range	10Ω		阻值范围
Resistance tolerance	J(±5%)		精度
Temperature coefficient	±250ppm/°C;		温度系数
Rated dissipation	0.5W		70°C 以下额定功率
Minimum Overload power to Fuse	12.5W		最低熔断功率
Time to fuse	< 60 seconds or upon request		熔断时间
Operation temprature	linearly derating from 25°C to155°C		工作环境温度
Insulation voltage	500V		绝缘耐压
Dimension	±1.0(mm)	L=8, D=3.5	尺寸
	±0.05(mm)	d=0.55	
Minimum packing quantity	10000		最小包装数量
Standard applied	Q\SLC023-2011; GB/T5729-1994; GB/T9546-1995; GB/T9547-1995		技术标准



* Unless otherwise specified, all values are tested at the following condition:

Temperature: 21°C to 25°C; Relative humidity: 45% to 70%;

5. ENVIRONMENTAL CHARACTERISTICS

(1) Temperature Coefficient Test

IEC 60115-1, 4.8: Test of resistors at room temperature and 60°C or 100°C on request above room temperature. Then measure the resistance. The Temperature Coefficient is calculated by the following equation and its value should be within the range requested.

$$\text{Resistor Temperature Coefficient} = \frac{R - R_0}{R_0} \times \frac{1}{t - t_0} \times 10^6$$

R = Resistance value under the testing temperature

R₀ = Resistance value at the room temperature

t = the 2nd testing temperature

t₀ = Room temperature

(2) Short Time Overload Test

IEC60115-1 4.13: At 2.5 times rated voltage or 2 times the maximum working voltage whichever is lower for 5 seconds, the resistor should be free from defects. The change of the resistance value should be within $\pm(1\%+0.05 \Omega)$ as compared with the value before the test.

(3) Resistance to soldering heat:

IEC 60115-1, 4.18: 260 \pm 3°C for 10 \pm 1 Seconds, immersed to a point 3 \pm 0.5mm from the body. The change of the resistance value should be within $\pm(1\%+0.05 \Omega)$ as compared with the value before the test.

(4) Damp Heat Steady State

IEC 60115-1, 4.24: 40 \pm 2°C, 90-95% RH for 56 days, loaded with 0.1 times RCWV or the maximum working voltage whichever is lower. The change of the resistance value should be within $\pm(5\%+0.05 \Omega)$ for normal tolerance as compared with the value before the test.

(5) Load Life Test

IEC 60115-1, 4.25: 70 \pm 2°C at RCWV or the maximum working voltage whichever is lower for 1,000+48/-0 Hr. (1.5Hr. on, 0.5Hr. off). The resistors shall be arranged not much effected mutually by the temperature of others and the excessive ventilation shall not be performed. The change of the resistance value should be within $\pm(5+0.05 \Omega)$ as compared with the value before the test.

Disclaimer

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