

Data Sheet

Customer:

Product: Wire Wound Chip Power Resistor –WR Series

Sizes.: 2615/3816/4525/6327

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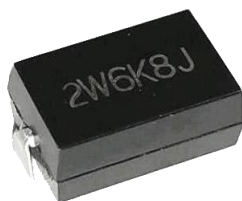
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Wire Wound Chip Power Resistor



Features

- Resistance range: 0.1 to 1.2K Ω
- High loading power, can bear high power load
- Nonflammable epoxy resin hot-pressing encapsulated, firm in structure
- Low noise, perfect stability and high reliability
- Good moisture-proof and environmental suitability
- Suitable for surface mounted (SMT) operating for automation
- Many kinds of size series for selection
- Non-inductive wire wound resistors is available that customized by customers

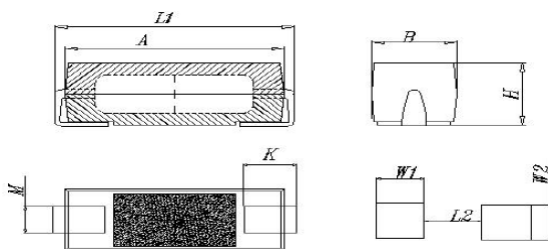
Applications

- Power supply models of communication
- High power supply
- Protection circuits of signal
- Power supply of STB or other terminal devices

Part Numbering

WR	27	J	T	E	R	1001
Product Type	Dimensions (L1×B)	Resistance Tolerance	Packaging Code	TCR (PPM/°C)	Power Rating	Resistance
	15: 2615 16: 3816 25: 4525 27: 6327	D: $\pm 0.5\%$ F: $\pm 1\%$ G: $\pm 2\%$ J: $\pm 5\%$	T: Taping Reel B: Bulk	E: ± 100 K: ± 150 F: ± 200 G: ± 300	U: 1/2W T: 1W S: 2W R: 3W D: 5W	0010: 1 Ω 4R70: 4.7 Ω 1001: 1K Ω

Dimensions

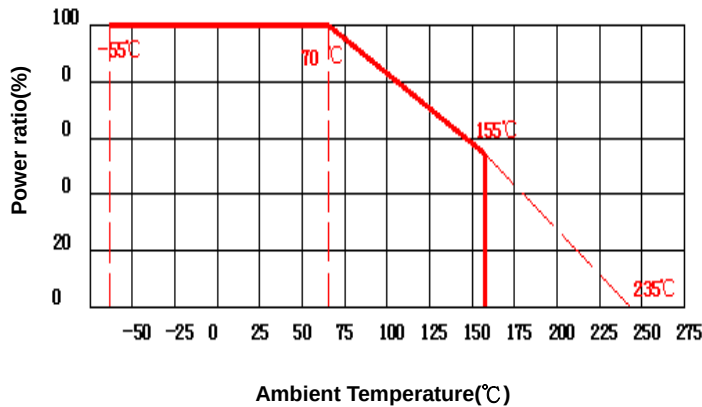


Unit: mm

Type	Size (Inch)	L1	A	B max.	H	K min.	M	W1	W2	L2	Packaging
15	2615	6.6 ± 0.5	5.6 ± 0.5	4.0	3.2 ± 0.25	1.2	1.0 ± 0.4	2.0	2.0	4.0	2000pcs
16	3816	9.6 ± 0.5	8.6 ± 0.5	4.2	3.5 ± 0.25	1.8	1.2 ± 0.4	3.0	2.2	5.2	2000pcs
25	4525	11.4 ± 0.5	10.2 ± 0.5	6.5	4.6 ± 0.25	2.2	2.0 ± 0.4	3.2	2.5	7.0	1000pcs
27	6327	15.9 ± 0.5	14.7 ± 0.5	7.0	6.4 ± 0.25	3.0	2.0 ± 0.4	4.5	3.0	8.8	800pcs

Derating Curve

Power rating is defined as maximum power rating continuously applied under ambient temperature at 70°C. when the ambient temperature exceeds 70°C. The power consumption of the product below.



Rated Voltage

Rated voltage is defined as the DC or AC (effective Value at commercial frequency example 50 C/S, 60 C/S). Voltage when rated power is applied and can be calculated By the following :

$$V = \sqrt{P \times R}$$

V = RATED VOLTAGE

P = RATED POWER (WATTS)

R = NOMINAL RESISTANCE VALUE (OHM)

When the calculated rated voltage exceeds the Maximum usable voltage flue shown in CHART, the Maximum usable voltage is defined as the voltage According to the power-decreasing curve shown in CHART.

Standard Electrical Specifications

Item Type	Power Rating	Operating Temp. Range	Max. Operating Voltage	Max. Overload Voltage	Dielectric Withstanding Voltage	Resistance Range				TCR (PPM/°C)
						±0.5%	±1%	±2%	±5%	
15 (2615)	1/2W 1W	-55 ~ +155°C	200V	350V	500V	-			0.22Ω – 0.49Ω	±300
						-			0.5Ω – 0.99Ω	±200
						-	1Ω – 9.9Ω			±150
						10Ω – 50Ω			±100	
16 (3816)	1W 2W	-55 ~ +155°C	250V	500V	500V	-			0.1Ω – 0.49Ω	±300
						-			0.5Ω – 0.99Ω	±200
						-	1Ω – 9.9Ω			±150
						10Ω – 200Ω			±100	
25 (4525)	2W 3W	-55 ~ +155°C	350V	700V	500V	-			0.1Ω – 0.49Ω	±300
						-			0.5Ω – 0.99Ω	±200
						-	1Ω – 9.9Ω			±150
						10Ω – 1KΩ			±100	
27 (6327)	3W 5W	-55 ~ +155°C	500V	800V	500V	-			0.1Ω – 0.49Ω	±300
						-			0.5Ω – 0.99Ω	±200
						-	1Ω – 9.9Ω			±150
						10Ω – 1.2KΩ			±100	

For special TCR which is not shown in the above table, please check us.

Environmental Characteristics

Item	Requirement	Test Method
Temperature Shock Test	$\pm(5\% + 0.05\Omega)$	-25°C for 30min, 25°C for 10min and 70°C for 30min as a cycle, 5cycles
Short Time Overload	$\pm(2\% + 0.05\Omega)$	RCWV*2.5 or Max. overload voltage whichever is lower for 5 seconds
Endurance	$\pm(5\% + 0.05\Omega)$	70 $\pm$ 3°C, RCWV for 1000 $\pm$ 48 hrs with 1.5 hrs "ON" and 0.5 hrs "OFF"
Damp Heat with Load	$\pm(5\% + 0.05\Omega)$	40 $\pm$ 2°C, 90~95% R.H. RCWV for 1000 $\pm$ 48 hrs with 1.5 hrs "ON" and 0.5 hrs "OFF"
Solderability	95% min. coverage	245 $\pm$ 5°C for 3 seconds
Dielectric Withstand Voltage	1000M Ω	Apply 500V~1000V for 1 minute

Pulse Curve

