APPROVAL SHEET

Product Name : Surface Mount Power Wire Wound Resistor

Part No. : SMW Series

Description : Size 3910 / 4720 / 6727

For more contact information, please refer to our website: www.rideetech.com

Surface Mount Power Wire Wound Resistor — SMW Series

■ Applications

— Power Suppliers

— Machine Tools

— Lighting Controls

— Motor Controls

■ Features

— High Power rating up to 5W

— Flameproof molded encapsulation

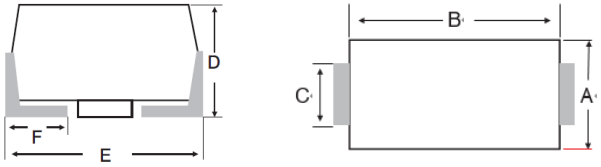
— Excellent Stability

— Meet RoHS and Halogen Free

■ Part Number Explanation

SMW	3910	F	10R0	T	S
Product	Size (Inch)	Tolerance	Resistance	Packaging	Functional
Surface Mount Power Wire Wound Resistor	3910 4720 6727	F：±1.0% J：±5.0%	100mΩ=R100 1Ω=1R00 10Ω=10R0 100Ω=100R	T= Tape & Reel	S= Standard Type

Standard Electrical Specifications and Dimension



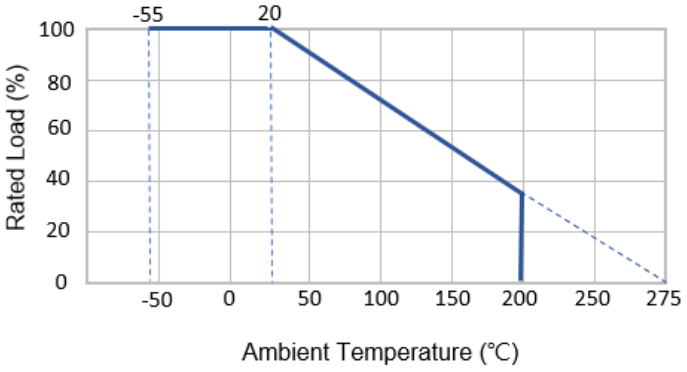
Item / Type	Rated Wattage	Max Working Voltage	Resistance Range	Dimension (mm)					
				A	B	C	D	E	F
SMW 3910	2 W	300V	0.1Ω≦R≦200Ω	4.0 ± 0.3	6.7 ± 0.3	1.4 ± 0.3	3.55 ± 0.3	7.9 (max)	1.5 ± 0.3
SMW 4720	3 W	500V	0.1Ω≦R≦300Ω	5.5 ± 0.3	10.5 ± 0.3	1.7 ± 0.3	5.0 ± 0.3	12 (max)	2.3 ± 0.3
SMW 6727	5 W	500V	0.1Ω≦R≦680Ω	7.3 ± 0.3	13.5 ± 0.3	1.7 ± 0.3	6.8 ± 0.3	17 (max)	2.5 ± 0.3

- TCR: ±200 PPM/℃
- Rated Voltage(V)=√(W*R). W：Rated Power, R：Resistance Value(Ω)
- Too low or too high ohmic values can be supplied only case by case.
- Beyond the above specification also can meet the special requirements. For detail questions, please contact us freely.

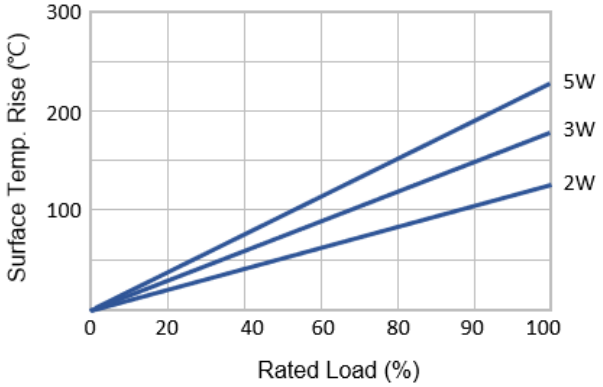
Power Derating Curve

For resistors operated in ambient temperatures above 20℃, the power rating must be derated in accordance with the curve below.

Operating Temperature Range: -55 to +200℃



Surface Temperature Rise



■ Reliability Test and Requirement

Test Item	Procedure	Requirements
Temperature Coefficient of Resistance (T.C.R)	TCR(ppm/℃) =(R2-R1)/R1 ×1 / (T2-T1)×10^6	±200 PPM/℃
Short Time Overload	5 × Rated wattage for 5sec Measurement at 30 min after test conclusion.	± 1%
Resistance to Soldering Heat	Solder dipping 270±5℃ for 10 sec. ±1sec.	△R ≦ ± 1% No mechanical damage
Rapid Change of Temperature	Repeat 5 cycles as follows -55±3℃(30 min.) + 25℃(2~3 min.) +200±3℃(30 min.) + 25℃(2~3 min.)	△R ≦ ± 1% No mechanical damage
Power Rating Load	Rated voltage for 30 minutes Measurement at 30 min after test conclusion.	△R ≦ ± 1%
Load Life	Permanent resistance change after 1000 hours (1.5 hours ON , 0.5 hour OFF) at RCWV or Max. Keep the resistor at 70℃ ambient	△R ≦ ± 2%
Insulation Resistance	DC：500V megger	10000MΩ
Dielectric Withstanding Voltage	AC 500V for 1 minute	No mechanical damage
Solderability	After immersing flux, dip in the 235±5℃ molten solder bath for 2 sec	Over 95% of termination must be covered
Load Life Humidity	40℃, 90%~95% RH, D.C. rated voltage for 1.5 hours ON 30 minutes OFF. Cycle repeated 500 hours.	△R ≦ ± 2%

- Storage Temperature: 5℃~35℃; Humidity 40%~75% RH
- Shelf Life: 1 year from production date
- Reference Standards: IEC 60115-1 / JIS C 5201-1