watts electronics private limited

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WIRE WOUND FUSIBLE RESISTOR

INTRODUCTION:

The WWF series wire wound fusible resistors are manufactured to perform as a regular resistor under normal conditions and as a fuse under excessive load.

In WWF series, resistors up to 5W, the resistance value is color coded with 3 bands plus a tolerance band. An additional white band indicates that the resistor is fusible.

For resistors 6W and above, the value is printed on the resistor.

SPECIFICATIONS

Type No.	Wattage	Dimensions in mm				Range in Ohms [Ω]		Tolerance	Dielectric withstanding Voltage
		D	L	H	d				
WWF 1 WWF 2 M	1W / 2W	3.20 ± 0.5	9 ± 0.5	26 ± 2.0	0.55 ± 0.05	0.1	150	5%	350 V
WWF 2 WWF 3 M	2W / 3W	4.25 ± 0.5	11 ± 1.0	26 ± 2.0	0.65 ± 0.05	10	150	5%	500 V
WWF 3 WWF 4 M	3W / 4W	5 ± 0.5	15 ± 1.0	26 ± 2.0	0.75 ± 0.05	10	150	5%	500 V
WWF 5 WWF 6 M	5W / 6W	6 ± 0.5	18 ± 1.0	30 ± 2.0	0.75 ± 0.05	10	150	5%	500 V
WWF 6 WWF 7 M WWF 8 MM	6W / 7W / 8W	8 ± 1.0	25 ± 1.0	38 ± 3.0	0.80 ± 0.05	10	150	5%	500 V
WWF 9 WWF 10 M	9W / 10W	8 ± 1.0	30 ± 1.0	38 ± 3.0	0.80 ± 0.05	10	150	5%	1000 V

'M' under 'Type No.' denotes miniature size.

FUSING CHARACTERISTICS

RESISTANCE RANGE	FUSING POWER	FUSING TIME	TCR
1 to 150	Rated power x 32	< 60 seconds	±100 ppm/°C

RoHS COMPLIANT

QUALITY SYSTEM CERTIFICATION DNV·GL ISO 9001:2008

STANDARD RESISTANCE VALUES
E 24 Series

10	11	12	13	15	16	18	20	22	24	27	30
33	36	39	43	47	51	56	62	68	75	82	91

Colour	1st figure	2nd figure	multiplier	Tolerance
Black	0	0	1	
Brown	1	1	10	±1%
Red	2	2	100	±2%
Orange	3	3	1,000	
Yellow	4	4	10,000	
Green	5	5	100,000	±0.5%
Blue	6	6	1,000,000	±0.25%
Violet	7	7	10,000,000	±0.1%
Gray	8	8		
White	9	9		
Gold			0.1	±5%
Silver			0.01	±10%

ELECTRICAL PERFORMANCE

Tests	Condition	Spec.
Resistance Temp. CoeV.	-55°C ~ 200°C	± 300 ppm/°C
Short Time Overload	5 times of rated wattage for 5 sec for upto 3w 10 times of rated wattage for 5 sec.above 3w	± 2%
Rated Load	Rated voltage for 30 min.	± 0.5%
Insulation Resistance	500 V megger	1,000 MΩ
Load Life	70°C on-off cycle 1,000hrs.	± 3%

POWER DERATING

For resistors operated at ambient temperatures above 70°C, power rating must be derated in accordance with the curve below.