

# Wire Wound Resistors

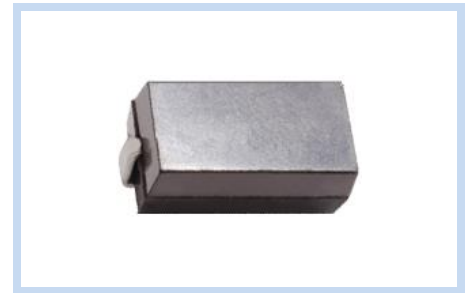
## Surface Mount AEC-Q200

MSMW-A Series

MERITEK

### FEATURE

- Excellent Mechanical Strength and Electrical Stability
- Excellent Stability at Environmental Conditions
- Special Design for Automatic Surface Mounting
- Flammability Classification 94V-0
- AEC-Q200 Compliant

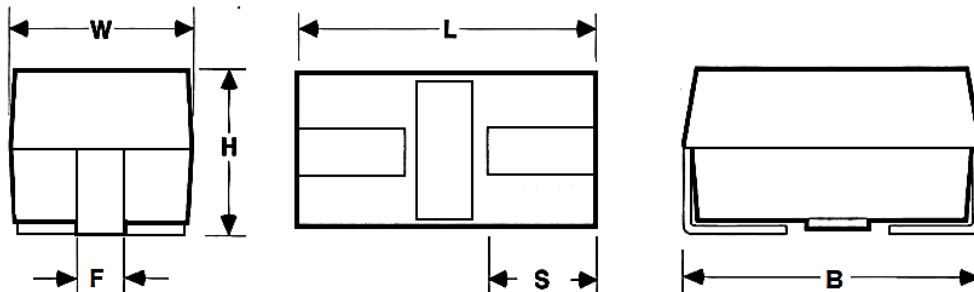


### ELECTRICAL CHARACTERISTICS AND DIMENSIONS

Rated Power	Resistance Range	TCR ppm/°C	Dimensions (mm)					
			W ±0.3	L ±0.3	F ±0.3	H ±0.3	B Max	S ±0.3
1W	0.1~200Ω	±20	4.0	6.7	1.4	3.55	7.9	1.5
2W	0.1~300Ω	±20	5.5	10.5	1.7	5.00	12.0	2.3
3W	0.1~500Ω	±20	7.3	13.5	1.7	6.80	17.0	2.5

**Notes:**

1. Rated Continuous Working Voltage (RCWV) =  $\sqrt{\text{Power Rating} \times \text{Resistance Value}}$ , or Max Permissible Voltage, Whichever less
2. Too low or too high ohmic values can be supplied only case by case
3. Operating Temperature: -55°C~150°C



### PART NUMBERING SYSTEM

MSMW (1)    3W (2)    4320F (4)    20 (5)    A (6)

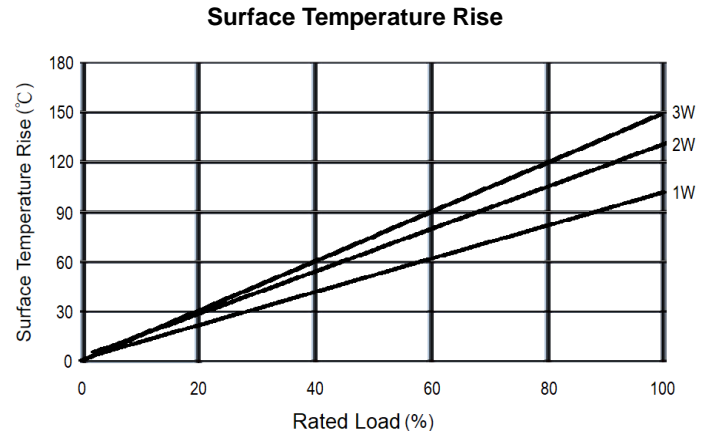
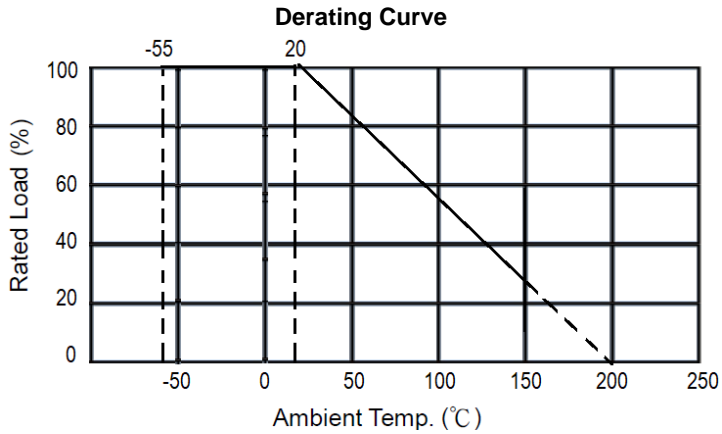
No	Item	Code	Description	
(1)	Product Code	MSMW	Wire Wound Resistor, Surface Mount Molded Wirewound type	
(2)	Power Rating	3W	3W	½, 1, 2, 3, 5, 7W Power Rating Options Available
(4)	Resistance	4320F	432Ω ±1% (F)	1R0: 1.0Ω, First three digits: Significant, Forth: Multiplier
(5)	Internal Code	20	20: ±20PPM	Internal Code or Project Reference
(6)	Series Code	A	AEC-Q200 series	

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## CHARACTERISTIC CURVES



## RELIABILITY TEST CONDITION AND REQUIREMENT

Item	Test Condition	Requirement
Temperature Coefficient of Resistance (TCR)	-55°C ~ +150°C	±200ppm/°C
Power Rating Load	Rated voltage for 30 minutes	ΔR/R ≤ ±1%, Surface temp. 200°C Max
Short Time Overload	5 times rated power for 5 seconds	±1%
Dielectric Withstanding Voltage	500VAC for 1 minute	No evidence of mechanical damage or insulation breakdown.
Insulation Resistance	500VDC megger	10,000MΩ
Solderability	235±5°C for 2 seconds	95% minimum coverage
Resistance to Soldering Heat	270±5°C for 10±1 seconds	ΔR/R ≤ ±1%, No evidence of mechanical damage
Temperature Cycle	-55°C(30min), Room Temp.(3min), 150°C(30min), Room Temp.(3min), 5 Cycles	ΔR/R ≤ ±1%
Load Life	Rated power load 1.5 hrs ON, 0.5hrs OFF 70°C for 1000 hours	ΔR/R ≤ ±2%
Load Life in Humidity	Rated power load 1.5 hrs ON, 0.5hrs OFF 40°C, 95% R.H. for 500 hours	ΔR/R ≤ ±2%

Note: Reference Standard: IEC 60115-1, JIS C 5201-1

\*Specification subject to change without notice.