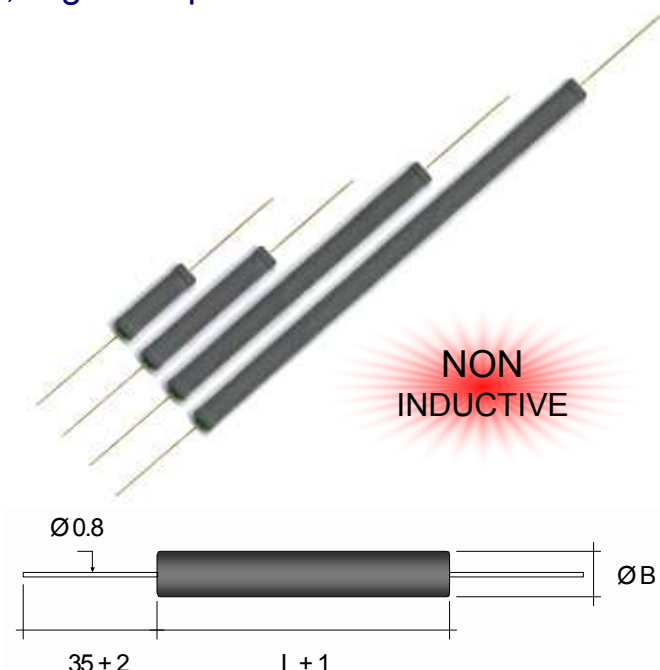


## High Voltage Power Resistors Series MS400 High Power, Non-Inductive, High Temperature

High Voltage Power Resistors Series MS400 combine proprietary non-inductive resistance system, power film technology and design to achieve high stability, increased power rating to 30 Watts and high operating voltages up to 30 kV.

MS400 Power Film Resistors cover a wide resistance range from 10Ω up to 30 MΩ and operating temperatures from -55°C to +275°C. These resistors are ideally suited for high power and high frequency applications.

Model	Wattage Rating	Max. Voltage	Dimensions in millimeters ± 0.50 [Dimensions in inches ± 0.02]	
			L	B
MS400.2	6.00	5'000	27.00 [1.07]	8.00 [0.32]
MS400.3	8.00	7'000	37.00 [1.46]	8.00 [0.32]
MS400.4	10.00	8'000	45.00 [1.77]	8.00 [0.32]
MS400.5	12.50	10'000	52.00 [2.05]	8.00 [0.32]
MS400.7	15.00	15'000	77.00 [3.03]	8.00 [0.32]
MS400.10	20.00	20'000	102.00 [4.02]	8.30 [0.33]
MS400.12	24.00	24'000	122.00 [4.80]	8.50 [0.34]
MS400.15	30.00	30'000	152.00 [5.98]	8.50 [0.34]



### Characteristics

Resistance Values	from 10Ω to as high as 30MΩ		
Tolerances	1%, 2%, 5%, 10% (other tolerances to 0.1% on request)		
Temperature Coefficients *	50 and 100 ppm/°C (other temperature coefficients to 25 ppm/°C on request)		
Operating Temperature	-55 .. +275°C	(extended temperature range to 350°C available)	
Insulation Resistance	> 10'000 MΩ	500 Volt 25 °C 75% relative humidity	
Dielectric Strength	> 1'000 Volt	25 °C 75% relative humidity	
Thermal Shock	Δ R/R < 0.5% or 0.5Ω max. whichever is greater	MIL Std. 202, method 107 Cond. C	IEC 68 - 2 -14
Overload	Δ R/R < 0.5% or 0.5Ω max. whichever is greater	5 x Pnom, 5 sec (do not exceed max. voltage)	
Moisture Resistance	Δ R/R < 0.5% or 0.5Ω max. whichever is greater	MIL Std. 202, method 106	IEC 68 - 2 - 3
Load Life	Δ R/R < 0.5% or 0.5Ω max. whichever is greater	1000 hours at rated power	IEC 115 - 1
Encapsulation	High Temp Silicone Conformal Coating	Core Material	Al <sub>2</sub> O <sub>3</sub> (96%)
Lead Material	Gold Plated Copper	Resistor Material	Ruthenium Oxide

\* Temperature Coefficient referenced to 25°C, ΔR taken at +105°C.

### Derating Curve

