

High Voltage Resistors Series 425

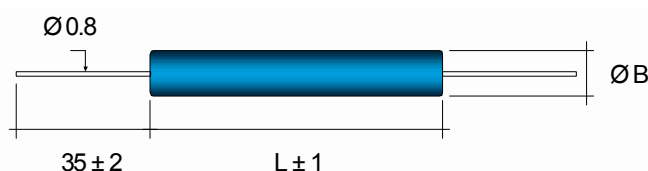
TC of 25 ppm/°C, Precision, Non-Inductive

High Voltage Resistors Series 425 have been developed to meet the precision temperature stability requirements of high accuracy and high voltage systems, combining proprietary non-inductive resistance system and design to achieve low temperature coefficient of 25 ppm/°C, low voltage coefficients and high stability.

Low TC Precision High Voltage Resistors Series 425 are designed to meet the demanding requirements of medical and industrial X-ray systems, power supplies or instruments.



Model	Wattage	Max. Oper. Voltage	Dimensions in millimeters ± 0.50 [Dimensions in inches ± 0.02]	
			L	B
425.2	2.00	8'000	27.00 [1.07]	8.00 [0.32]
425.3	3.00	12'000	37.00 [1.46]	8.00 [0.32]
425.4	3.50	14'000	45.00 [1.77]	8.00 [0.32]
425.5	4.00	17'000	52.00 [2.05]	8.00 [0.32]
425.7	6.00	25'000	77.00 [3.03]	8.00 [0.32]
425.10	8.00	35'000	102.00 [4.02]	8.30 [0.33]
425.12	10.00	40'000	122.00 [4.80]	8.50 [0.34]
425.15	12.00	50'000	152.00 [5.98]	8.50 [0.34]



Characteristics

Resistance Values	from 100KΩ to as high as 1GΩ		
Tolerances	0.1%, 0.25%, 0.5%, 1%, 2%, 5%, 10%		
Temperature Coefficient	25 ppm/°C referenced to 25°C, ΔR taken at 0°C and 85°C		
Operating Temperature	-55 .. +225°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	ΔR 0.20% max.	MIL Std. 202, method 107 Cond. B	
Overload	ΔR 0.20% max.	1,5 x Pnom, 5 sec (do not exceed max. voltage)	
Moisture Resistance	ΔR 0.40% max.	MIL Std. 202, method 106	
Load Life	ΔR 0.25% max.	1000 hours at rated power	
Encapsulation	Blue Silicone Conformal Coating	Core Material	Al ₂ O ₃ (96%)
Lead Material	Gold Plated	Resistor Material	Ruthenium Oxide

Voltage Coefficients of Resistance

Model	Resistance Range	VCR (-ppm/V)*
425.2	100K .. 250M	< 0.20
425.3	150K .. 400M	< 0.20
425.4	170K .. 450M	< 0.20
425.5	200K .. 500M	< 0.15
425.7	300K .. 700M	< 0.10
425.10	400K .. 1G	< 0.08
425.12	500K .. 1G	< 0.06
425.15	600K .. 1G	< 0.04

* typical values, contact factory for details

Derating Curve

