



- **High Surge Energy**
- **Non-Inductive**
- **Compact Size**

The "U" series of non-inductive, ceramic composite resistors are designed for inrush limiting in motor drives, UPS and other power conversion systems. They are ideal for circuitry which is subject to surges, high peak power or high energy, offering enhanced performance over other resistor types. In pulsed applications, these compact resistors distribute the energy uniformly throughout their structure, resulting in low thermal stress. The result is increased reliability, and reduced size, compared to other resistor types. High-temperature, solvent-resistant epoxy coating allows operation in almost any environment, and the familiar radial lead construction offers convenient use.

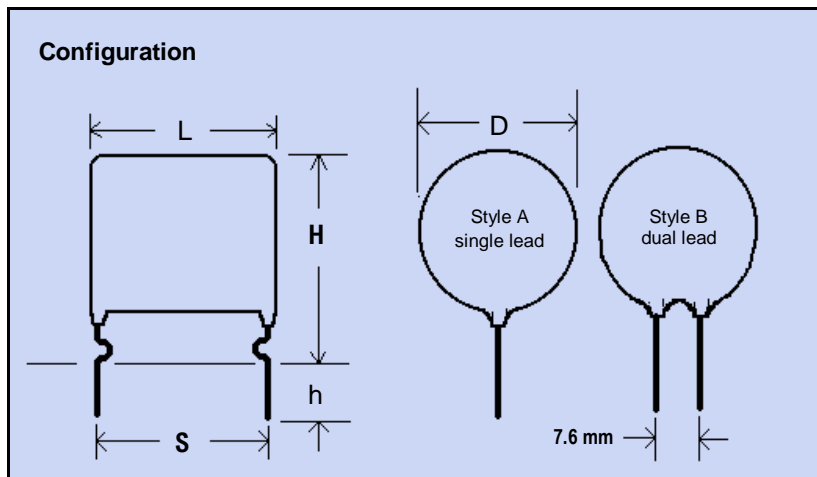
Part Number	Resistance <sup>1</sup> (Ohms)	L max (mm)	D max (mm)	H max (mm)	h min (mm)	S nom (mm)	Lead (AWG)	Impulse <sup>2</sup> (Volts)	P <sub>avg</sub> <sup>3</sup> (Watts)	Energy <sup>4</sup> (Joules)
U1315AXXXX	3.3 to 10K	15	13	22	3.5	12.5	20	1000	2.0	250
U1320AXXXX	4.7 to 15K	20	13	22	3.5	17.5	20	1500	2.5	400
U2115AXXXX	1.0 to 3.3K	15	21	26	4.0	12.5	18	1000	3.5	700
U2125AXXXX	2.2 to 6.8K	25	21	26	4.0	22.5	18	2000	4.5	1400
U2616AXXXX	1.0 to 2.2K	16	26	35	4.0	14.0	18	1500	4.5	1400
U2630BXXXX	1.5 to 4.7K	30	26	35	4.0	27.5	18	2500	5.5	2800

1. EIA standard values, E6, E12

2. In air

3. Free air, 40°C ambient

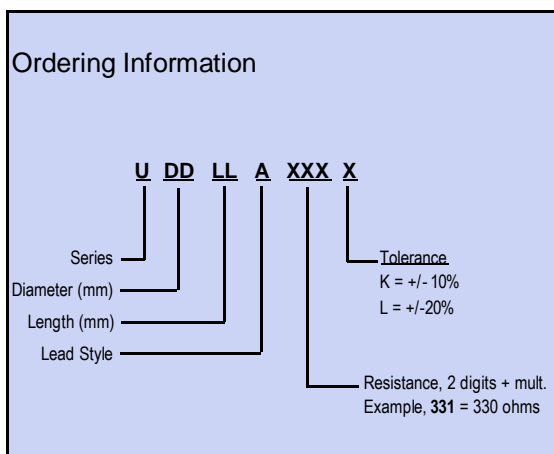
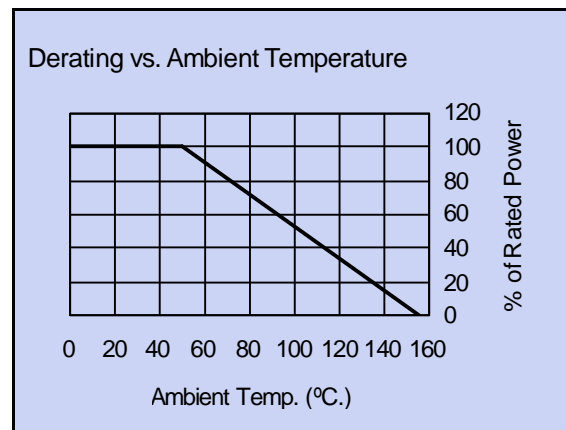
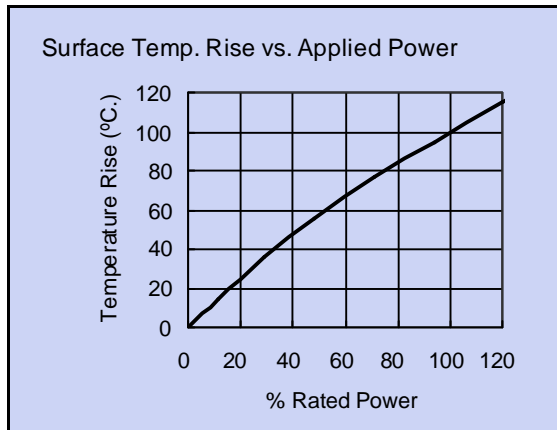
4. Single impulse



# U Series Resistors

## Technical Data

Parameter	Maximum $\Delta R$	Test Method
Life Test	+5%	MIL-STD-202F, method 108A. except 50°C. 1000 hrs. @ rated power; 1.5 hrs. ON, .5 hrs OFF
Single Pulse Energy	+/-1.5%	Single pulse, capacitor discharge at Rated Energy; 350vDC for 1315, 1320, 2115 sizes; 650vDC for 2125, 2616, 2630 sizes.
Repetitive HV Pulsing	+/-2.0%	10 joules @ 5.0kV, 10,000 cycles
Short-time Overload	+/-1.5%	10x rated power. 5 seconds ON, 5 seconds OFF, 5 cycles.
Short-term High Temperature	+/-1.5%	250 °C for 30 seconds
Long-term High Temperature	+/-2.0%	1000 hours @ 150 °C
Thermal Shock Cycle	+/-2.0%	MIL-STD-202F, method 107D. -55 °C to +125 °C, 5 cycles
Moisture resistance	+/-1.0%	90%-95% rh @ 40 °C, 1000 hrs.



**The Company...**

HVR Advanced Power Components, Inc. is an affiliate of HVR International, Ltd. the major world-wide supplier of ceramic composition resistors. We provide a wide range of components in sizes from 1 watt to 200kW.

**How it works...**

Ceramic composition resistors comprise a solid body of high temperature resistive material with bonded metal electrodes. This simple, "bulk" construction concentrates nearly all of the component mass into the resistive element, resulting in a rugged device capable of withstanding large energy surges and peaks, up to several hundred times the average power rating. By dissipating energy uniformly throughout the component, these resistors achieve high reliability and small size. Bulk resistors are inherently non-inductive, making them ideal for pulsed applications.