

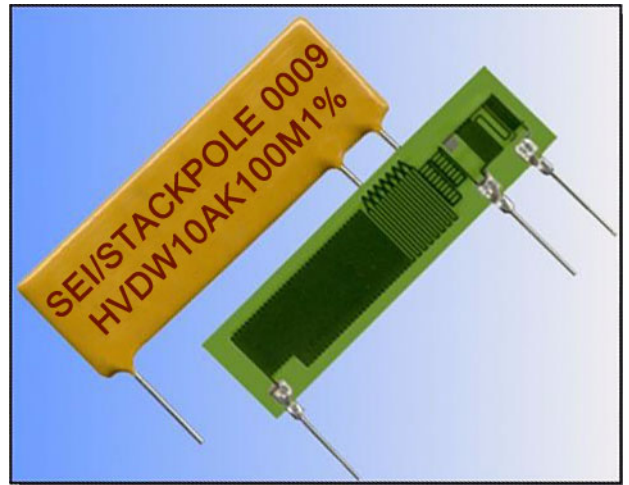
HVD Series — High Voltage Leaded Resistors

Utilizing fine film resistor deposition technology SEI now offers a new level of stability and performance in leaded resistor dividers.

Competing product technologies have constraints due to their dependence on certain limiting composite materials. Traditional thick film products have restricted performance characteristics, while thin film offerings are confined within certain ohmic value ranges.

In addition to improving on these limitations the fine film deposition demonstrates new characteristics, such as a longer high-aspect ratio trace of lower resistivity film.

These fine film resistor dividers provide unique design efficiency, versatility, and linearity, through the combination of long line, high aspect ratio and higher conductivity film.



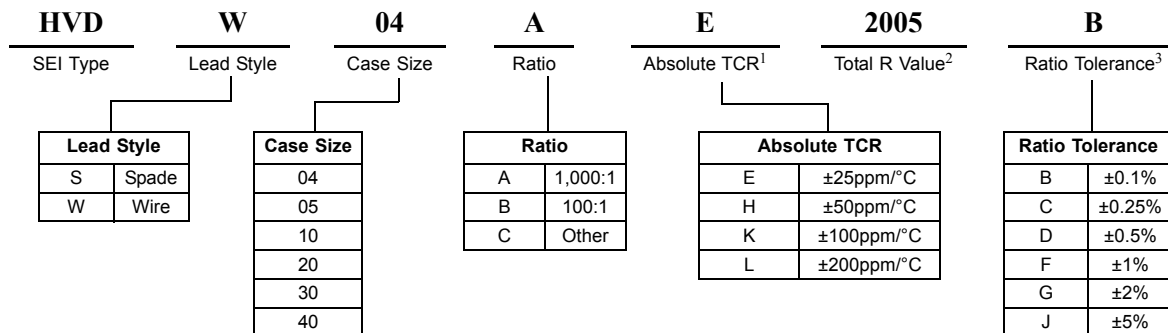
Features

- Ohmic values to 2,000G
- Voltage ratings to 40,000 volts
- Ultra high stability
- Tight tolerances to 0.1%
- Very low noise
- Low TCR to 10ppm/°C
- Low TCR tracking to 5ppm/°C
- Low VCR to 0.05ppm/volt
- Custom solutions available
- RoHS compliant / lead-free

Electrical Specifications

HVD Case Size	Power (watts) @ 25°C	Maximum Voltage Rating (kV)	Tolerance
04	0.5	4	0.1% – 1%
05	1	5	0.1% – 1%
10	1	10	0.25% – 1%
20	2	20	0.25% – 0.5%
30	3	30	0.5% – 5%
40	6	40	0.5% – 5%

How to Order



Note 1: TCR Tracking typically <25% of the Absolute TCR to a minimum of 10ppm/°C

Note 2: Express value as a four digit number, the first three numbers are the significant value and the forth number is the number of zeros

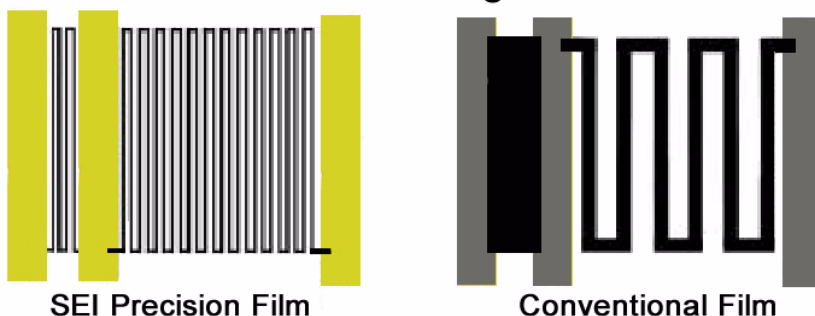
Note 3: The Absolute Tolerance is 5% unless otherwise specified

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Design Flexibility

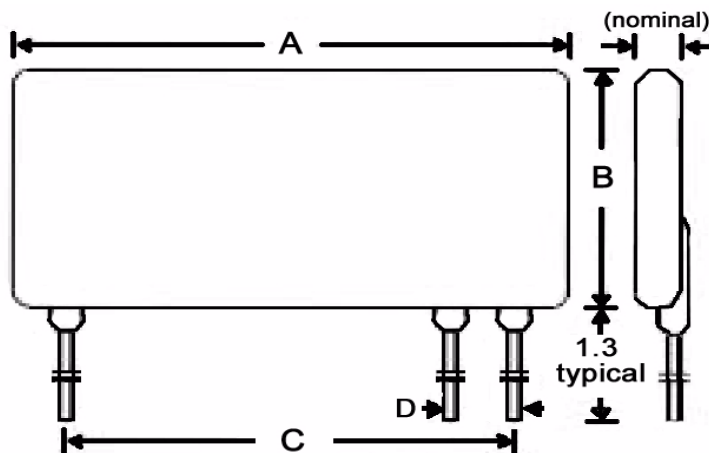
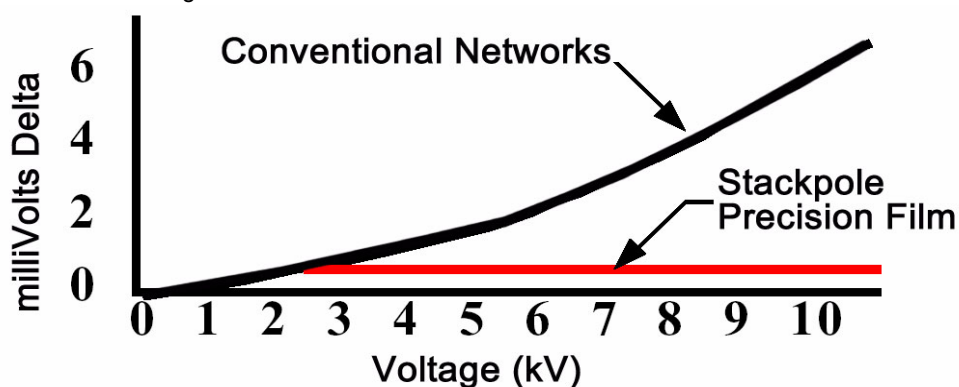
The HVD series can accommodate virtually any divider ratio due to the long serpentine pattern in the fine film manufacturing, combined with the utilization of low ohms/square thick film inks. Please contact SEI with custom design needs.

Divider Design



Excellent VCR Tracking

The VCR is virtually flat over a wide range of values.



Mechanical Specifications

HVD Case Size	A	B	C	D	Units
04	0.5 +0.08/-0.03 12.7 +2.032/-0.762	0.375 ± 0.03 9.525 ± 0.762	0.4 10.16	0.2 5.08	inches mm
05	1.0 +0.08/-0.03 25.4 +2.032/-0.762	0.375 ± 0.03 9.525 ± 0.762	0.9 22.86	0.2 5.08	inches mm
10	1.5 +0.08/-0.03 38.1 +2.032/-0.762	0.5 ± 0.03 12.7 ± 0.762	1.3 33.02	0.2 5.08	inches mm
20	2.0 +0.08/-0.03 50.8 +2.032/-0.762	0.75 ± 0.03 19.05 ± 0.762	1.9 48.26	0.2 5.08	inches mm
30	3.0 +0.08/-0.03 76.2 +2.032/-0.762	0.75 ± 0.03 19.05 ± 0.762	2.9 73.66	0.2 5.08	inches mm
40	4.0 +0.08/-0.03 101.6 +2.032/-0.762	0.75 ± 0.03 19.05 ± 0.762	3.9 99.06	0.2 5.08	inches mm