

# UD, HD

High Voltage Divider Set,  
Thick film, Non-Inductive R1 & R2

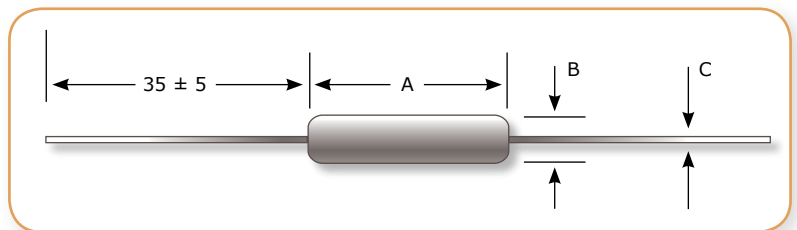


## Precision High Voltage Dividers, Various Voltage Ratio, High Frequency; Economic Price

Willow offers HD and UD series to meet special purpose of requirements High Voltage High Frequency Functional Precision divider set at reasonable price. Application, ultra precision high voltage probes, multi channel input impedance, various kinds of precision voltage - dividing equipments.



DIMENSIONS [mm]



| Model Nr. | Wattage | Max. Continuous Oper. Volt[kV] | Resistance [ ohm ] R1 + R2 | Voltage Ratio       | R1 of dimension [mm] |   |     | R1, R2 tap type |
|-----------|---------|--------------------------------|----------------------------|---------------------|----------------------|---|-----|-----------------|
|           |         |                                |                            |                     | A                    | B | C   |                 |
| HD10      | 2       | 10                             | 10M~10G                    | 1:100 ~<br>1: 20000 | 39                   | 8 | 1.0 | available       |
| HD15      | 3.5     | 15                             | 10M~10G                    | 1:100 ~<br>1: 20000 | 52                   | 8 | 1.0 | available       |
| HD22      | 5       | 22                             | 10M~10G                    | 1:100 ~<br>1: 20000 | 76                   | 8 | 1.0 | available       |
| HD32      | 7.5     | 32                             | 10M~10G                    | 1:100 ~<br>1: 20000 | 102                  | 9 | 1.0 | available       |
| HD48      | 10      | 48                             | 10M~10G                    | 1:100 ~<br>1: 20000 | 152                  | 9 | 1.0 | available       |

\* Custom design & Voltage Ratio, Ohmic Value available upon request

\* Described Electrical specification for total R-value of 50Megohm to 1Gigohm only

1) HD series: independable R1 + R2, they are 1.0 dia axial leads wire standard, 5 dia x 15 Long, or 7 dia x 24 Long, or custom dimension available

2) HD series: R1; tap type and R; tap that is "tap to tap" or "tap to wire" or "wire to wire" 3 styles are available upon request

# UD, HD

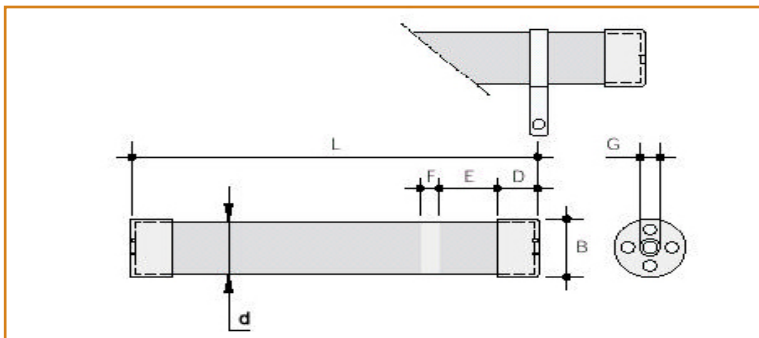
High Voltage Divider Set,  
Thick film, Non-Inductive R1 & R2



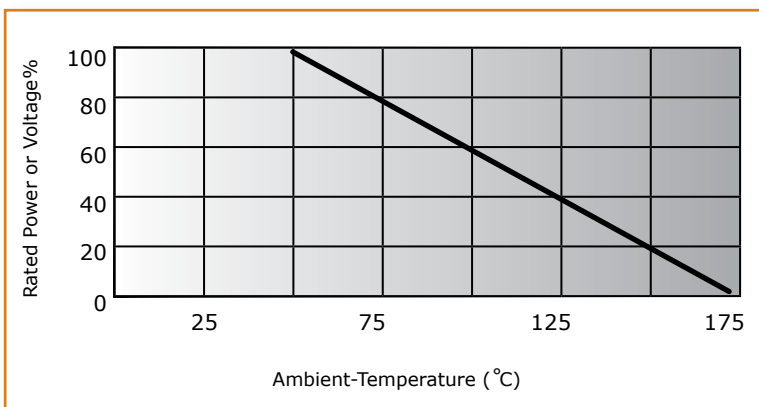
| Model Nr. | Wattage | Max. Continuous Oper. Volt[kV] | Resistance [ ohm ] R1+R2 | Voltage Ratio | Dimensions in millimeters |        |        |        |        |        |    |
|-----------|---------|--------------------------------|--------------------------|---------------|---------------------------|--------|--------|--------|--------|--------|----|
|           |         |                                |                          |               | L +/-3                    | B +/-2 | d +/-2 | D +/-1 | E +/-2 | F +/-1 | G  |
| UD40      | 10      | 40                             | 10M~10G                  | 1:100~1:20000 | 158                       | 16     | 15     | 12     | 12.7   | 5      | M4 |
| UD48      | 10      | 48                             | 10M~10G                  | 1:100~1:20000 | 180                       | 10     | 10     | 12     | N/A    | N/A    | M4 |
| UD80      | 50      | 80                             | 10M~10G                  | 1:100~1:20000 | 308                       | 32     | 32     | 18     | 40     | 7      | M6 |

- 1) UD48 of R2 ; custom dimension and termination type available, R1 R2 are individual body , and able to combined by M4 tap  
2) UD40 UD80; R1 & R2 are in one body

## DIMENSIONS of UD-series [mm]



## DERATING CURVE



## SPECIFICATIONS

**Absolute Resistance Tolerance :**  
1% typ.

**Voltage Ratio Tolerance :**  
0.1% ~1.0%

**Temperature Coefficient :**  
70ppm/°C typ. , Custom 25ppm/°C 50ppm/°C referenced to 25°C, from -25°C to +70°C, other TCR available upon requests.

**Overload/Voltage :**  
1.5 x rated power for 5sec :  
DR 0.25%(do not exceed 1.5 x V max)

**Thermal Shock :**  
Mil-Std-202, Method-107, Cond. C, DR 0.25% max.

**Load Life :**  
1.000 hours at rated power  
DR 0.50%

**Moisture Resistance :**  
Mil-Std-202, Method 106, DR 0.5%.

**Insulation Resistance :**  
10,000Megohms Min.

**Termination Cap of Material :**  
Tinned plated  
Cap, or Nickel Plated Cap, Bronz Cap

**Encapsulation :**  
Epoxy Conformal Coat,  
Polymer Conformal coat or Glass coat

cf.: The described specifications & dimensions subject to change without notice.