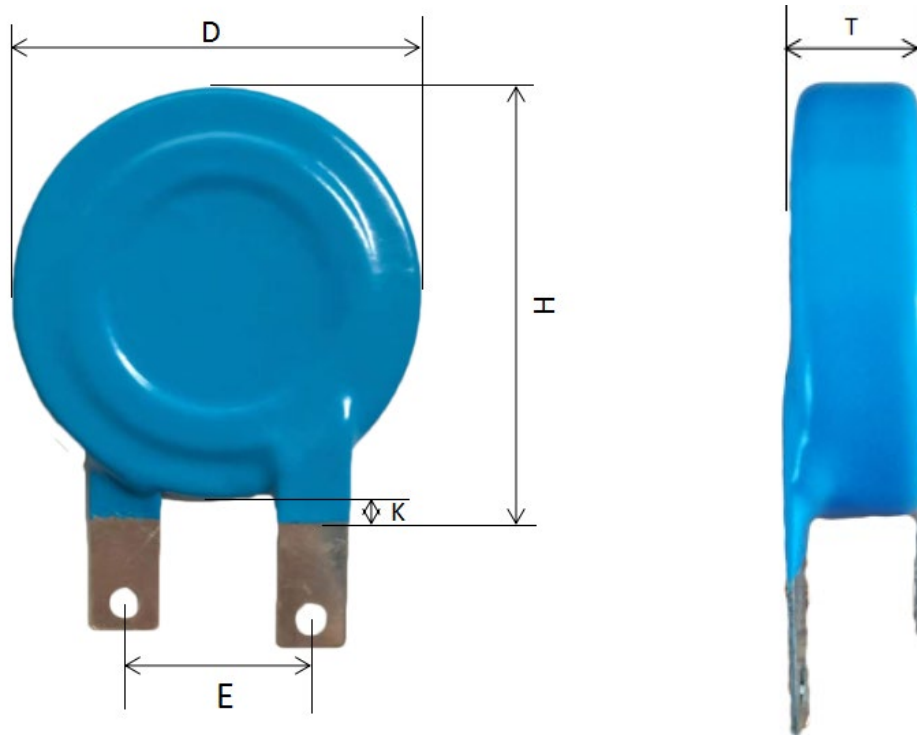


# MDE Semiconductor, Inc.

## MOV



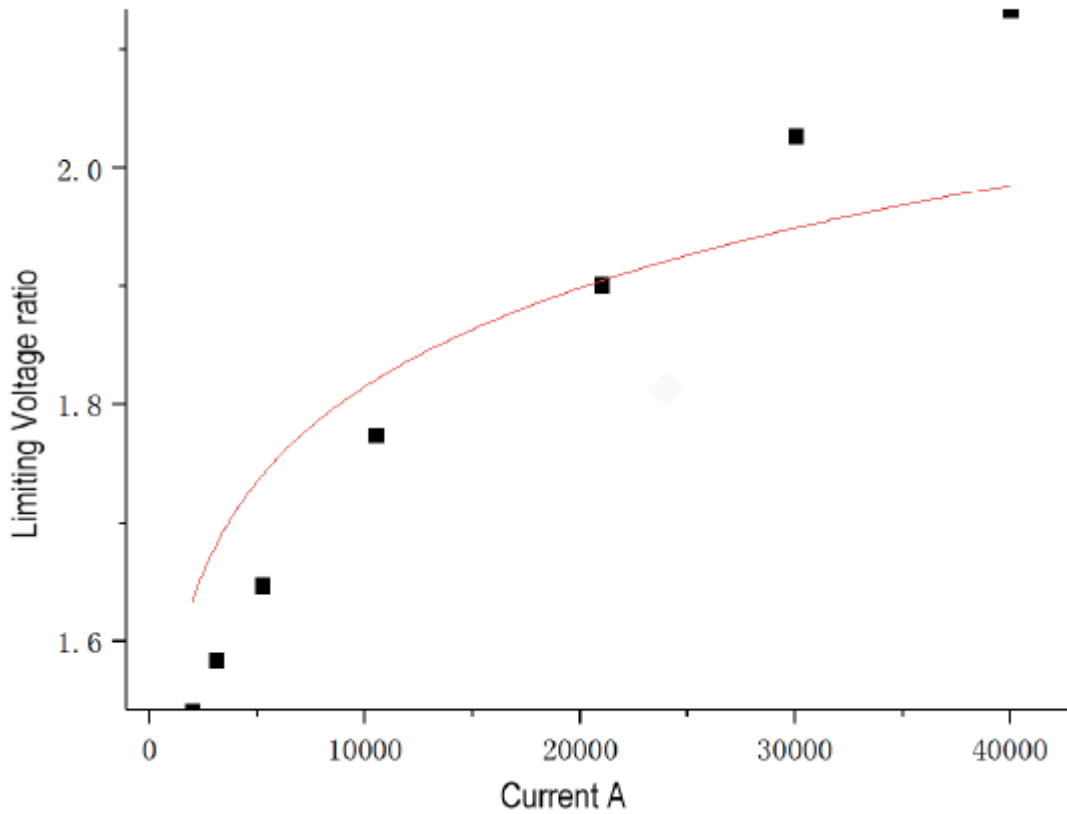
## Technical Features

|  |               |
|--|---------------|
| Part No.   | MDE-70D182K   |
| Maximum voltage protection level                       | <6.5kV@50kA   |
| Maximum Allowable AC Voltage                           | 1100V         |
| Maximum Allowable DC Voltage                           | 1485V         |
| Varistor Voltage                                       | 1620-1980V1mA |
| Maximum DC Leakage Current                             | ≤ 15 μA       |
| Nonlinear exponent                                     | ≥22           |
| Max. discharge current(8/20) I <sub>max</sub> x 1 time | 100kA         |
| D(Max)   | 75mm          |
| H(Max)   | 80mm          |
| E  | 25.4 ± 0.5mm  |
| T(Max)   | 11.5mm        |
| K(Max)   | 3.2mm         |

## Packing method

6pcs/box      20box/carton

# MDE Semiconductor, Inc.



70D-182K 8/20 Limiting Voltage ratio Curves

| Current A<br>I, A | Clamp V<br>U, V | R=U/I<br>$\Omega$ | Log R   | Log I  | $(\log I)^2$ | (Clamp<br>Voltage/V <sub>I<sub>ma</sub></sub> )<br>U/1809 |
|-------------------|-----------------|-------------------|---------|--------|--------------|---|
| 1960              | 2806            | 1.4316            | 0.1558  | 3.2923 | 10.8392      | 1.5418  |
| 3080              | 2883            | 0.9360            | -0.0287 | 3.4886 | 12.1703      | 1.5841  |
| 5200              | 2998            | 0.5765            | -0.2392 | 3.7160 | 13.8087      | 1.6473  |
| 10500             | 3229            | 0.3075            | -0.5121 | 4.0212 | 16.1700      | 1.7742  |
| 21000             | 3460            | 0.1648            | -0.7831 | 4.3222 | 18.6814      | 1.9011  |
| 30000             | 3690            | 0.1230            | -0.9101 | 4.4771 | 20.0444      | 2.0275  |
| 40000             | 3882            | 0.0971            | -1.0130 | 4.6021 | 21.1793      | 2.1330  |

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| sample | MDE-70D182K |                   |
|--------|-------------|-------------------|
| No.    | V1ma (V)    | Leakage info (uA) |
| 1#     | 1812        | 1.5               |
| 2#     | 1809        | 1.1               |
| 3#     | 1818        | 0.9               |
| 4#     | 1818        | 0.9               |
| 5#     | 1818        | 0.8               |
| 6#     | 1813        | 1.0               |