



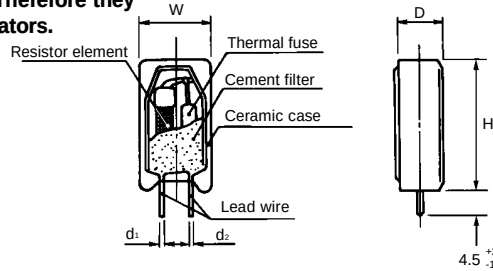
## MEG Thermal Fuse Incorporated Cement Resistors

MES

MER

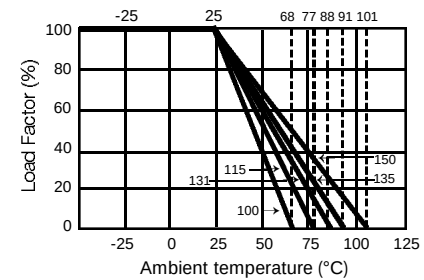
Since thermal fuses are incorporated, cement resistors respond quickly to overloading as well as external overheating.

These resistors also provide outstanding features against surges. Therefore they are suitable for the prevention of inrush current for switching regulators.



| Type | Dimensions (mm) |     |          |                |                | Temperature Range of Each Element |           |         |
|------|-----------------|-----|----------|----------------|----------------|-----------------------------------|-----------|---------|
|      | W               | D   | H        | d <sub>1</sub> | d <sub>2</sub> | MEG                               | MES       | MER     |
| 02   | 11±1            | 7±1 | 20.5±1.5 | 0.8±0.1        | 0.6±0.1        | 4.7~20                            | 0.15~200  | 100~13K |
| 03   | 12±1            | 8±1 | 25.0±1.5 | 0.8±0.1        | 0.6±0.1        | 4.7~20                            | 0.27~360  | 100~22K |
| 05   | 13±1            | 9±1 | 25.5±1.5 | 0.8±0.1        | 0.6±0.1        | 4.7~91                            | 0.3~510   | 100~27K |
| 07   | 13±1            | 9±1 | 38.5±1.5 | 1.0±0.1        | 1.0±0.1        | —                                 | 0.51~1500 | —       |

Derating Curve

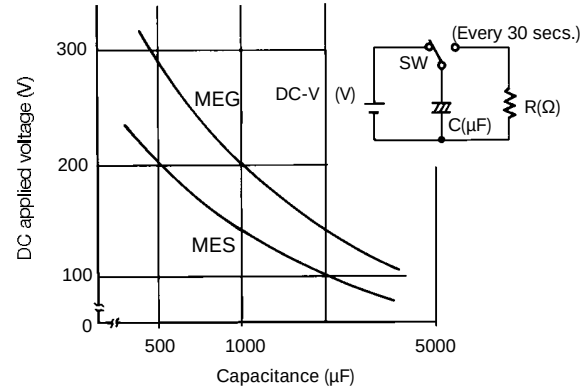


Rated Power, Resistance Range, Tolerance, etc.

| Type | Resistance Range | Tolerance           | Type of Thermal Fuse        |                                | Continuous Rated Power |
|------|------------------|---------------------|-----------------------------|--------------------------------|------------------------|
|      |                  |                     | Nominal Operating Temp (°C) | Operating Temp. (°C)           |                        |
| 02   | 0.15Ω~13KΩ       | J:±5%<br><br>K:±10% | 100                         | 95± <sup>6</sup> <sub>2</sub>  | 0.7W                   |
|      |                  |                     | 115                         | 110±4                          | 1.0W                   |
|      |                  |                     | 131                         | 126±4                          | 1.4W                   |
|      |                  |                     | 135                         | 130±4                          | 1.5W                   |
|      |                  |                     | 150                         | 145±4                          | 1.9W                   |
| 03   | 0.27Ω~22KΩ       |                     | 100                         | 95± <sup>6</sup> <sub>2</sub>  | 0.75W                  |
|      |                  |                     | 115                         | 110±4                          | 1.05W                  |
|      |                  |                     | 131                         | 126±4                          | 1.45W                  |
|      |                  |                     | 135                         | 130±4                          | 1.55W                  |
|      |                  |                     | 150                         | 145±4                          | 2.0W                   |
| 05   | 0.3Ω~27KΩ        |                     | 100                         | 95± <sup>6</sup> <sub>2</sub>  | 0.8W                   |
|      |                  |                     | 115                         | 110±4                          | 1.1W                   |
|      |                  |                     | 131                         | 126±4                          | 1.5W                   |
|      |                  |                     | 135                         | 130±4                          | 1.6W                   |
|      |                  |                     | 150                         | 145±4                          | 2.1W                   |
| 07   | 0.51Ω~1.5KΩ      |                     | 101                         | 99± <sup>2</sup> <sub>6</sub>  | 1.3W                   |
|      |                  |                     | 113                         | 109± <sup>6</sup> <sub>2</sub> | 1.6W                   |
|      |                  |                     | 121                         | 119±4                          | 1.9W                   |
|      |                  |                     | 133                         | 129±4                          | 2.2W                   |
|      |                  |                     | 147                         | 139±4                          | 2.7W                   |

### Withstand Surge Characteristics

Comparison of withstand surge characteristics between MES5W



### Standard Product

MEG 05N, ±5%, 135°C

Resistance: E6, E12 Series

In addition to the 10A fuses, special items can also be designed and manufactured.

MEG and MES 5W series are approved by UL.

### Part Numbering System

M E

Thermal fuse incorporated cement resistor

G

Element  
G - Wire wound type (ceramic core)  
S - Wire wound type (glass fiber core)  
R - Metal oxide film

0 5

Type

N

Mounting metal fitting  
N - Nil

1 0 0

Nominal Resistance

J

Tolerance for resistance  
J:±5%  
K:±10%

U

Spec.:U=UL Spec. (Standard)

1 3 5

Nominal operating temperature 135°C (Standard)