

# Anti-Surge Resistor



SRC/M Series

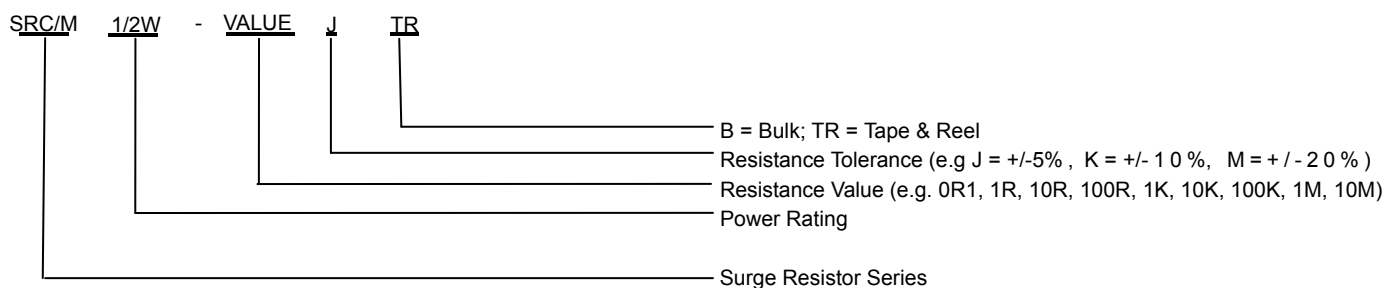
MERITEK

The Anti-Surge Resistor can replace carbon composition resistors.  
It offers enhanced performance in high voltage power supplies.

## Features :

- Replaces 1 and 2 watt carbon composition resistors.
- Withstands high peak power and offers 10% tolerance
- Withstands high energy density demands

## Part Number System :



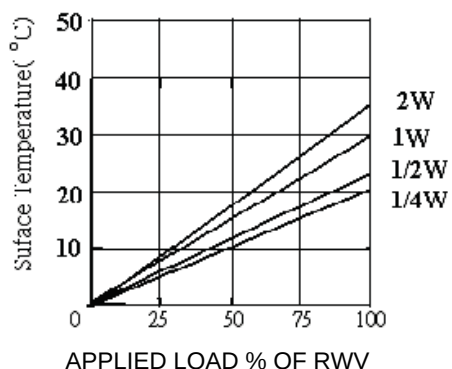
## Appearance :



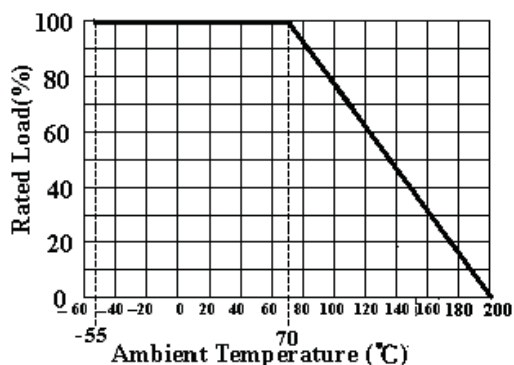
| STYLE    | DIMENSION(mm)  |               |              |                 | Resistance Range                                                                     |
|----------|----------------|---------------|--------------|-----------------|--------------------------------------------------------------------------------------|
| Standard | L              | D             | H            | d               |                                                                                      |
| SRC1/2W  | 11.5 $\pm$ 1.0 | 4.5 $\pm$ 0.5 | 35 $\pm$ 2.0 | 0.78 $\pm$ 0.03 | 10 $\Omega$ ~10K $\Omega$ ( $\pm 10\%$ )<br>3 $\Omega$ 3~9 $\Omega$ 9 ( $\pm 20\%$ ) |
| SRC1W    | 15.5 $\pm$ 1.0 | 5.0 $\pm$ 0.5 | 32 $\pm$ 2.0 | 0.78 $\pm$ 0.03 |                                                                                      |
| SRC2W    | 17.5 $\pm$ 1.0 | 6.5 $\pm$ 0.5 | 35 $\pm$ 2.0 | 0.78 $\pm$ 0.03 |                                                                                      |
| SRM1/2W  | 11.5 $\pm$ 1.0 | 4.5 $\pm$ 0.5 | 35 $\pm$ 2.0 | 0.78 $\pm$ 0.03 | 1K~1M ( $\pm 10\%$ )                                                                 |
| SRM1W    | 15.5 $\pm$ 1.0 | 5.0 $\pm$ 0.5 | 32 $\pm$ 2.0 | 0.78 $\pm$ 0.03 |                                                                                      |
| SRM2W    | 15.5 $\pm$ 1.0 | 5.0 $\pm$ 0.5 | 35 $\pm$ 2.0 | 0.78 $\pm$ 0.03 |                                                                                      |

## Curves :

Surface temp. rise



Power graph



# Anti-Surge Resistor



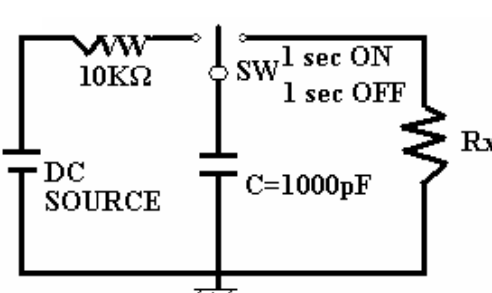
SRC/M Series

MERITEK

## Ratings :

| TYPE     | POWER RATING | MAX. WORKING VOLTAGE | MAX. OVERLOAD VOLTAGE | DIELECTRIC WITHSTANDING VOLTAGE | MAX. SURGE VOLTAGE | OPERATING TEMP. RANGE |
|----------|--------------|----------------------|-----------------------|---------------------------------|--------------------|-----------------------|
| SRC-1/2W | 1/2W         | 200V                 | 400V                  | 500V                            | 10KV               | - 40°C to + 200°C     |
| SRC-1W   | 1W           | 300V                 | 600V                  | 500V                            | 14KV               |                       |
| SRC-2W   | 2W           | 400V                 | 800V                  | 500V                            | 18KV               |                       |
| SRM-1/2W | 1/2W         | 200V                 | 400V                  | 500V                            | 10KV               |                       |
| SRM-1W   | 1W           | 300V                 | 600V                  | 500V                            | 15KV               |                       |
| SRM-2W   | 2W           | 400V                 | 800V                  | 500V                            | 25KV               |                       |

## Specifications :

| TEST CHARACTERISTICS                         | Test Methods                                                                                                                                                               | SPECIFICATIONS                                                                                |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Short time overload                          | Rated Voltage X 2.5 or Max. overload Vol., whichever is lower, for 5sec.                                                                                                   | $\pm (1.0\% + 0.05 \Omega)$                                                                   |
| TEMPERATURE COEFFICIENT(T.C.R.)              | Resistance value at room Temperature and room Temperature+100°C                                                                                                            | SRC < 10K = $\pm 300$ ppm<br>SRM $\geq 10K = \pm 200$ ppm                                     |
| Surge Voltage Characteristics (EN60065 TEST) | Discharge Test : 10KV 1000pf capacitor, Input pulse 50 time at 1 pulse / 5sec. max.<br> | SRx1/4W = 3KV<br>SRx1/2W = 10KV<br>SRx1W = 10KV<br>SRx2W = 10KV<br>$\pm (20\% + 0.05 \Omega)$ |
| Resistance to soldering temperature          | 260°C $\pm 5^\circ\text{C}$ at 10s $\pm 1$ s or 350°C $\pm 10^\circ\text{C}$ at 3.5s $\pm 0.5$ s                                                                           | $\pm (1.0\% + 0.05 \Omega)$                                                                   |
| Moisture resistance                          | 40°C $\pm 2^\circ\text{C}$ at 90%~95%RH, 1000h. Power cycle is 90 min 【ON】 30 min 【OFF】                                                                                    | $\pm (5.0\% + 0.05 \Omega)$                                                                   |
| Terminal strength                            | Direct load for 10 sec. In the direction of the terminal leads.                                                                                                            | Tensile strength: $\geq 2.5$ kg                                                               |
| Load Life                                    | SRC : 1000 hours at rated voltage, 40°C *<br>SRM : 1000 hours at rated voltage, 70°C *                                                                                     | $\pm (5.0\% + 0.05 \Omega)$                                                                   |

\* Power cycle is 90 min on and 30 min off