

# Surge Absorber (Spark Gap)



MSA Series

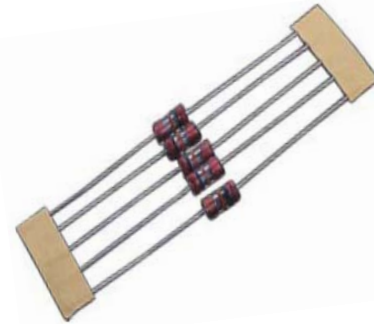
MERITEK

UL E223045

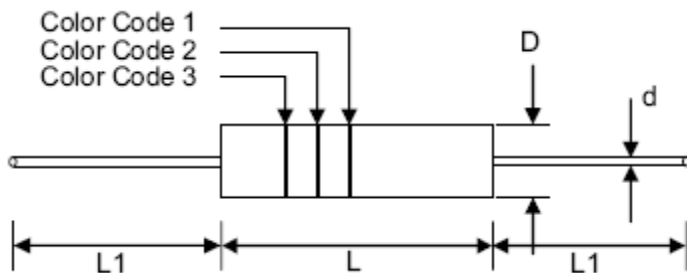
## MSA1 SERIES

### FEATURES

- Response time < 1ns
- MSA1 Surge Current is 3000A
- Stable and very Small electrostatic capacitance (< 0.8pf) and great isolation (> 100M)
- Standard protection required by US UL497A and UL497B
- Small size



### DIMENSION



| Item | MSA1      |
|------|-----------|
| L    | 4.0±0.5   |
|      | 5.3±0.5   |
|      | 7.0±0.5   |
| L1   | 28.0±3.0  |
| D    | φ3.1±0.5  |
|      | φ4.1±0.3  |
| d    | φ0.5±0.05 |

### ELECTRICAL CHARACTERISTICS

| PART NUMBER | DC Spark-Over Voltage | Minimum Insulation Resistance |                       | Maximu Capacitance (1KHz-6V <sub>MAX</sub> ) | Surge current capacity | Surge Life Test |
|-------------|-----------------------|-------------------------------|-----------------------|--|------------------------|-----------------|
|             | V <sub>s</sub> (V)    | Test Voltage (V)              | I <sub>ohm</sub> (MΩ) | C (pF)                                       |                        |                 |
| MSA1XX00702 | 140                   | 50                            | 100                   | 0.8  | 3000                   | 250 times       |
| MSA1XX01502 | 300                   | 250                           | 100                   | 0.8  |                        |                 |
| MSA1XX02002 | 400                   | 250                           | 100                   | 0.8  |                        |                 |
| MSA1XX02502 | 500                   | 500                           | 100                   | 0.8  |                        |                 |
| MSA1XX03502 | 700                   | 500                           | 100                   | 0.8  |                        |                 |
| MSA1XX05002 | 1000                  | 500                           | 100                   | 0.8  |                        |                 |
| MSA1XX07502 | 1500                  | 500                           | 100                   | 0.8  |                        |                 |
| MSA1XX09002 | 1800                  | 500                           | 100                   | 0.8  |                        |                 |
| MSA1XX10002 | 2000                  | 500                           | 100                   | 0.8  |                        |                 |
| MSA1XX12002 | 2400                  | 500                           | 100                   | 0.8  |                        |                 |
| MSA1XX13502 | 2700                  | 500                           | 100                   | 0.8  |                        |                 |
| MSA1XX15002 | 3000                  | 500                           | 100                   | 0.8  |                        |                 |
| MSA1XX18002 | 3600                  | 500                           | 100                   | 0.8  |                        |                 |
| MSA1XX20002 | 4000                  | 500                           | 100                   | 0.8  |                        |                 |
| MSA1XX22502 | 4500                  | 500                           | 100                   | 0.8  |                        |                 |
| MSA1XX25002 | 5000                  | 500                           | 100                   | 0.8  |                        |                 |

Note: V<sub>s</sub>±XX%

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## COLOR CODE

| Part Number | Color Code 1 | Color Code 2 | Color Code 3 |
|-------------|--------------|--------------|--------------|
| MSA1XX00702 | Black        | Yellow       | -            |
| MSA1XX01502 | Orange       | -            | -            |
| MSA1XX02002 | Yellow       | -            | -            |
| MSA1XX02502 | Green        | -            | -            |
| MSA1XX03502 | Purple       | -            | -            |
| MSA1XX05002 | Brown        | Black        | Red          |
| MSA1XX07502 | Brown        | Green        | Red          |
| MSA1XX09002 | Brown        | Gray         | Red          |
| MSA1XX10002 | Red          | Black        | Red          |
| MSA1XX12002 | Red          | Yellow       | Red          |
| MSA1XX13502 | Red          | Purple       | Red          |
| MSA1XX15002 | Orange       | Black        | Red          |
| MSA1XX18002 | Orange       | Blue         | Red          |
| MSA1XX20002 | Yellow       | Black        | Red          |
| MSA1XX22502 | Yellow       | Green        | Red          |
| MSA1XX25002 | Green        | Black        | Red          |