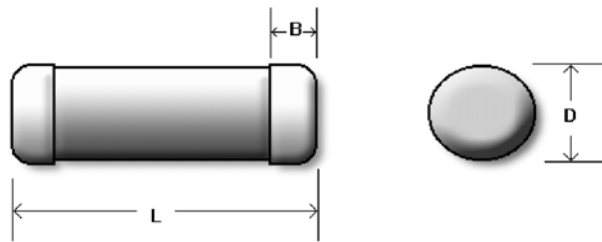


# SRS303 Spark-Noise Reduction Slug Resistor

## Features

Dedicatedly designed for high-voltage spark ignition systems. Proprietary conductive film withstands high-voltage surge impacts with long-term stability. One of few sources in the world capable of manufacturing such type of resistor.



## Dimensions

| Body Length (L) | Body Diameter (D) | Cap Length (B) | Net Weight Per 1000 pcs |
|-----------------|-------------------|----------------|-------------------------|
| 16 ±1 mm        | 4.5 ±0.3 mm       | 2.2 ±0.2 mm    | 700 grams               |

## General Specifications

| Power Rating | Max Working Voltage | Max. Surge Load | Resistance Range Min. | Resistance Range Max. | Resistance Tolerance | Standard Resistance Value |
|--------------|---------------------|-----------------|-----------------------|-----------------------|----------------------|---------------------------|
| 2W           | 400V                | 35KV / 20nS     | 1KΩ                   | 10KΩ                  | ±20% ~ 5%            | E-24                      |

## Performance Specifications

| Characteristics                            | Limits          |
|--|-----------------|
| Dielectric Withstanding Voltage, VAC or DC | 500             |
| Temperature Coefficient, PPM / °C          | ±1200           |
| Operating Temperature Range, °C            | -55~+155        |
| Insulation Resistance, MΩ                  | 10 <sup>4</sup> |

| Tests Characteristics | Test Conditions   | Limit       |
|-----------------------|---|-------------|
| Short Time Overload   | IEC 60115-1 4.13<br>5 seconds 2.5x rated voltage (not over max. overload voltage)   | ±(2%+0.05R) |
| Load Life In Humidity | IEC 60115-1 4.24<br>56 days at 40°C and 93% relative humidity   | ±(5%+0.05R) |
| Load Life 1,000 hours | IEC 60115-1 4.25.1<br>Rated load 1.5 hours ON, 0.5 hours OFF, at 70°C   | ±(5%+0.05R) |
| Vibration             | MIL-STD-202 Method 204<br>Six hours in each parallel and axial direction w/ a simple harmonic motion having an amplitude of 1.52mm and 10 to 20,000 Hz. | ±(3%+0.05R) |
| Terminal Endurance    | IEC 60115-1 4.25.3<br>1000 hours at 155°C without load  | ±(3%+0.05R) |
| Thermal Shock         | IEC 60115-1 4.19<br>-55°C 30minutes, +155°C 30minutes, 5 cycles   | ±(3%+0.05R) |

*Special sizes, values, and specifications not listed available on special order.*

Apr. 08, 2001

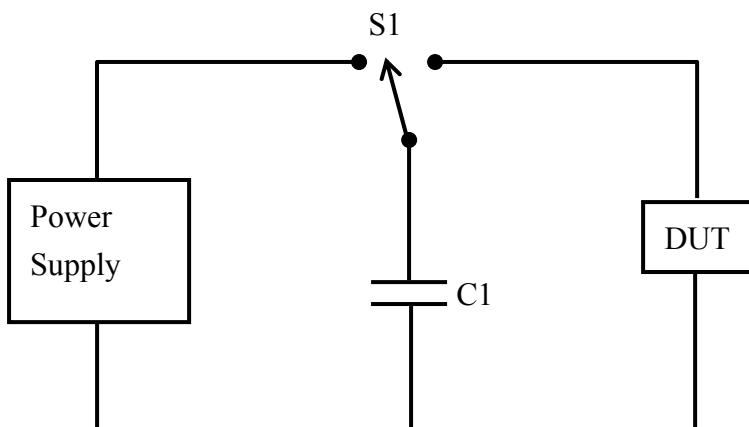
# SRS-303 Spark-Noise Reduction Slug Resistor

## Ordering Information

| Type   | Tolerance | Temperature Coefficient | Resistance Value | Packaging | Special Request (Optional) |
|--------|-----------|-------------------------|------------------|-----------|----------------------------|
| SRS303 | J (5%)    | TK1200                  | 10K              | B         | LV (Low value)             |

## Surge Test

Surge test circuit of 35KV / 30nS load / 500mS period / 200,000 surges:



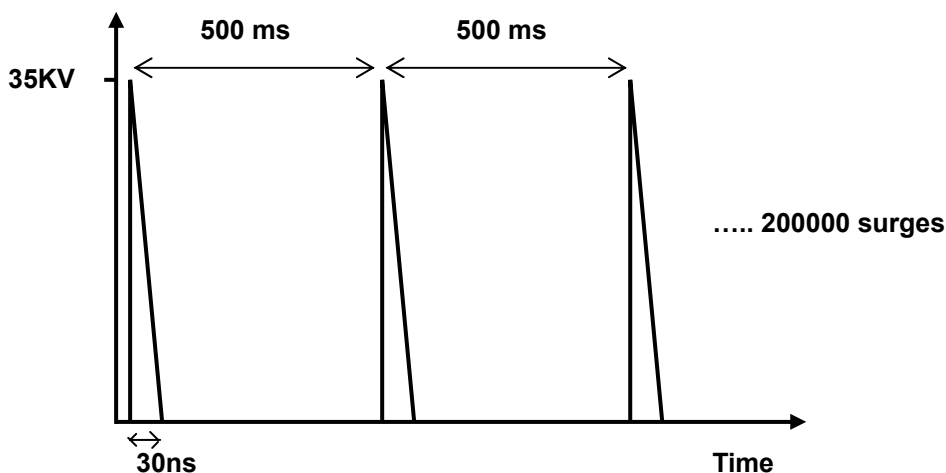
**S1:** High-voltage insulated two-throw switch

**C1:** High-voltage variable capacitor

**Power supply:** Variable 0 ~ 50KV DC

**DUT:** Device Under Test. SRS303 herein.

Surge diagram:



Apr. 08, 2001