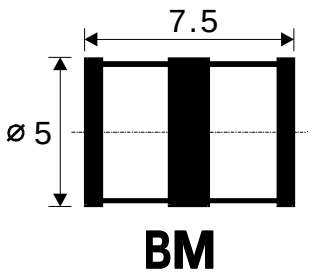
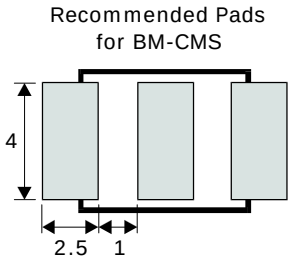
# 3-Element Surge Arrester
# Miniature Gas Tubes
# BM




**Note: All dimensions are in millimeters.**

The Citel BM Gas Discharge Tubes use non- radioactive technology and have been designed to protect Telecom and Datacom equipment against lightning surges and electrical transients.

The BM-CMS version is SMD compatible.

- **Non-radioactive**
- **UL approved**
- **Soldering characteristics comply with CEI 68-2-20 standards.**
- **ISO 9002 certified**

# Electrical Specifications
# BM

| | BM - 90 | BM - 150 | BM - 230 | BM - 350 | BM - 500 |
|---|---|---|---|---|---|
| **DC Spark-over voltage (100 V/s):** | 70-120 V | 120-180 V | 200-350 V | 280-440 V | 400-600 V |
| **Tolerance (%):** | +/- 20 | +/- 20 | +/- 20 | +/- 20 | +/- 20 |
| **Impulse Spark-over voltage: (1kV/ms)** | <700 V | <700 V | <800 V | <1100 V | <1200 V |
| **Isolation Resistance: (100 V DC)** | >1GΩ | >1GΩ | >1GΩ | >1GΩ | >1GΩ |
| **Capacitance: (1 Mhz)** | <1 pF | <1 pF | <1 pF | <1 pF | <1 pF |
| **AC Discharge Current: (50 Hz; 1s; 10x's)** | 5 A | 5 A | 5 A | 5 A | 5 A |
| **Arc Voltage:** | <25 V | <25 V | <25 V | <25 V | <25 V |
| **Power Handling: (8/20μs- 10 x's)** | 5 kA | 5 kA | 5 kA | 5 kA | 5 kA |

Note: Other DC sparkover voltages can be offered upon request.

# Part Number

| Description: | Part No: |
|---|---|
| Bare gas tube | BM |
| SMD version | BM-CMS |

# Soldering Methods

The BM-CMS series is designed in compliance with SMD technology like Vapor Phase and Infrared Tunnel. The terminal coating is Sn-Pb with a Nickel barrier.

Recommendations of Soldering:
- The assembly should be pre-heated to about 100°C to minimize the thermal shock.
- The typical solder temperature is 215°C (max. 260°C) and the exposure time at this temperature should not exceed 20 seconds.
- Considering the dimensions of the gas tube, the wave soldering method is not recommended.