



Basic circuit diagram

PCB layout dimensions

Type 2CA thermally protected MOV designed to open in the event of overheating due to an abnormal over-voltage or temporary over voltage (TOV) and will interrupt any abnormal current that may be encountered.

- UL recognized Type 2ca surge suppressor according to UL 1449 4th Ed. Rev: 2016-03-17 and CSA Electrical Certification Notice 516/CSA C22.2 No. 8 13, compliant with IEC/EN 61643-1/11 standard. UL file No.:E319871
- Quick thermal response and perfect circuit cutoff function due to special thermal disconnecter design with arc extinguishing device (Patent No.US20110170217A1).
- Wide operating temperature range and high reliability.
- High surge current capability and low leakage current.
- floating remote signaling contact (50mA 12Vdc) for fault indication
- Type 1CA SPD, application in the AC mains, service entrance, and heavy industrial etc.
- Short circuit current rating (SCCR) 200kArms

| Part No. | SMTMOV150C | SMTMOV180C | SMTMOV275C A | SMTMOV320C | SMTMOV420C | SMTMOV550C | SMTMOV690C | |
|---|----------------------------------|---|-----------------|------------|------------|------------|------------|-----------|
| Compliance | ANSI/UL 1449-4 ; EN/IEC 61643-11 | | | | | | | |
| Category | Type 2CA | | | | | | | |
| Max. continuous operating (AC/DC) voltage | MCOV | 150V/200V | 180V/230V | 275V/350V | 320V/410V | 420V/560V | 550V/745V | 690V/910V |
| Nominal discharge current (8/20) | In | 20kA | | | | | | |
| Max. discharge current (8/20) | Imax | 50kA | | | 40kA | | | |
| Voltage protection level | VPR | <0.6kV | <0.6kV | <0.8kV | <1.0kV | <1.5kV | <1.5kV | <2.0kV |
| Response time | ta | ≤25 ns | | | | | | |
| Short Circuit Current Rating | SCCR | 200kA | | | | | | |
| Electric Strength | | ≥2500V | | | | | | |
| Insulation Resistance | | ≥10 MOhm | | | | | | |
| Enclosure material | | thermoplastic; extinguishing degree UL94 V-0 | | | | | | |
| Operating temperature range | | Temperature Range: - 40° C ~ +85° C; Humidity: ≤95%; Altitude: ≤2000m | | | | | | |
| Disconnecter instructions | | viewed through top hole of plastic housing | | | | | | |
| Remote alarm contact | | floating contact (50mA 12Vdc) for fault indication | | | | | | |
| Failure Indication /Status | | RED- Failure, viewed through top hole of plastic housing | | | | | | |
| Mounting | | PCB | | | | | | |
| Approvals, Certifications | | cULus, CE | | | | | | |

Dimension drawing

