FAIDEE

# Surge Protector with dv/dt FILTER

## AC Line Surge & dv/dt Protector

**Model : SPF101-20DIN**

Max. surge current 20kA, Load Current 1 A


**Fast response time**

**Thermal sensing inside MOV**

**Low-Let through voltage and dv/dt**

**Multi-state surge protection**

**Easy to installation**

Since Electronic technology continues to advance at a rapid pace with the move towards mini-arisation through large scale integrated circuitry. This results to lower susceptibility of the sensitive electronics components or system to electrical transient or surge cased by Lightning or Power Line fault Induction.

**SPF101-20DIN** Surge Protector with dv/dt FILTER SPF, has been specically developed to match to the AC Line surge protection requirement of surge protection on AC line low voltage application, according to the recommendation of various standards such as ANSI/IEEE, AS/NZS, BS, UL etc. and Lowpass filter by LC Filter.

## *Specification* Breakthrough Solution

| | |
|---|---|
| **Electrical Systems** | |
| Normal Line Voltage | 220 Vrms ±15% |
| Load Current | 1 A |
| No. of Phase | 1 phase 3 wire |
| Line Frequency | 47-53 Hz |
| **Protection Configuration** | |
| Installation | Serise |
| Protection Mode | All mode (L-N, L-G, N-G) |
| Response time | < 5 nS |
| Isolation Resistance | 1000 MΩ |
| Leakge current | <10mA at AC 320 Vrms |
| **Surge Performance** | |
| 1st Surge Current Rating | 20kA for 8/20uS |
| 2nd Surge Current Rating | 13kA for 8/20uS |
| N-G Surge Current Rating | 16kA for 8/20uS |
| Energy Absorption | > 380J @2mS |
| Let-through voltage | < 360Vp at Cat. C1 |
| Let-through dv/dt | < 20V/uS |
| Max. Clamping Voltage (@ ac 50Hz) | 320 Vrms |
| RFI/EMI Filter | Niose Filter by LC Filter@2kHz |
| **Monitor & Display** | |
| Protective Sensing | Thermal Fuse inside MOV |
| Protective Display | LED Status |
| **Physical** | |
| Enclosure | Metal |
| Operating Temperature | -40 °C - 55 °C |
| Dimension | 90 × 150 × 58 (L×W×H) mm |
| Weight | 0.29kg |
| **Standards** | |
| ANSI C62.41-1991, UL-1449 (2nd editor 1996) | |
| AS/NZS 1768-1991, BS-6651, IEC61643-1 | |
| **Approval** | |
| UL CSA | |

**Parts Approval**

FAIDEE

# Surge Protector with dv/dt FILTER

## AC Line Surge & dv/dt Protector

**Model : SPF105-20PN**

Max. surge current 20kA, Load Current 5 A


**Fast response time**

**Thermal sensing inside MOV**

**Low-Let through voltage and dv/dt**

**Multi-state surge protection**

**Easy to installation**

Since Electronic technology continues to advance at a rapid pace with the move towards mini-arisation through large scale integrated circuitry. This results to lower susceptibility of the sensitive electronics components or system to electrical transient or surge cased by Lightning or Power Line fault Induction.

**SPF105-20PN** Surge Protector with dv/dt FILTER SPF, has been specically developed to match to the AC Line surge protection requirement of surge protection on AC line low voltage application, according to the recommendation of various standards such as ANSI/IEEE, AS/NZS, BS, UL etc. and Lowpass filter by LC Filter.

## *Specification* Breakthrough Solution

| Electrical Systems | |
|---|---|
| Normal Line Voltage | 220 Vrms ±15% |
| Load Current | 5 A |
| No. of Phase | 1 phase 3 wire |
| Line Frequency | 47-53 Hz |

| Protection Configuration | |
|---|---|
| Installation | Serise |
| Protection Mode | All mode (L-N, L-G, N-G) |
| Response time | < 5 nS |
| Isolation Resistance | 1000 MΩ |
| Leakge current | <10mA at AC 320 Vrms |

| Surge Performance | |
|---|---|
| 1st Surge Current Rating | 20kA for 8/20uS |
| 2nd Surge Current Rating | 13kA for 8/20uS |
| N-G Surge Current Rating | 16kA for 8/20uS |
| Energy Absorption | > 380J @2mS |
| Let-through voltage | < 360Vp at Cat. C1 |
| Let-through dv/dt | < 20V/uS |
| Max. Clamping Voltage (@ ac 50Hz) | 320 Vrms |
| RFI/EMI Filter | Niose Filter by LC Filter@2kHz |

| Monitor & Display | |
|---|---|
| Protective Sensing | Thermal Fuse inside MOV |
| Protective Display | Multi-Color LED Status |

| Physical | |
|---|---|
| Enclosure | Metal |
| Operating Temperature | -40 °C - 55 °C |
| Dimension | 140 × 80 × 80 (L×W×H) mm |
| Weight | 0.41kg |

| Standards |
|---|
| ANSI C62.41-1991, UL-1449 (2nd editor 1996) |
| AS/NZS 1768-1991, BS-6651, IEC61643-1 |

| Approval |
|---|
| UL CSA |

**Parts Approval**