# SUPA400 Series Planar High-Power Resistors

Thick-film, non-inductive design · Rated power 400W

## Applications

- Widely used in instrument transformers
- Motor drives and control circuits
- Medical equipment (X-ray, etc.)
- High-voltage supplies and new-energy applications



## Technical Features

- Thick-film, non-inductive design
- Complies with ROHS requirements
- Good pulse load capability
- Easy to install
- For automatic transmission control, power supplies, control equipment and other applications

## Ordering Guide

Model: SUPA400

Resistance: 1R

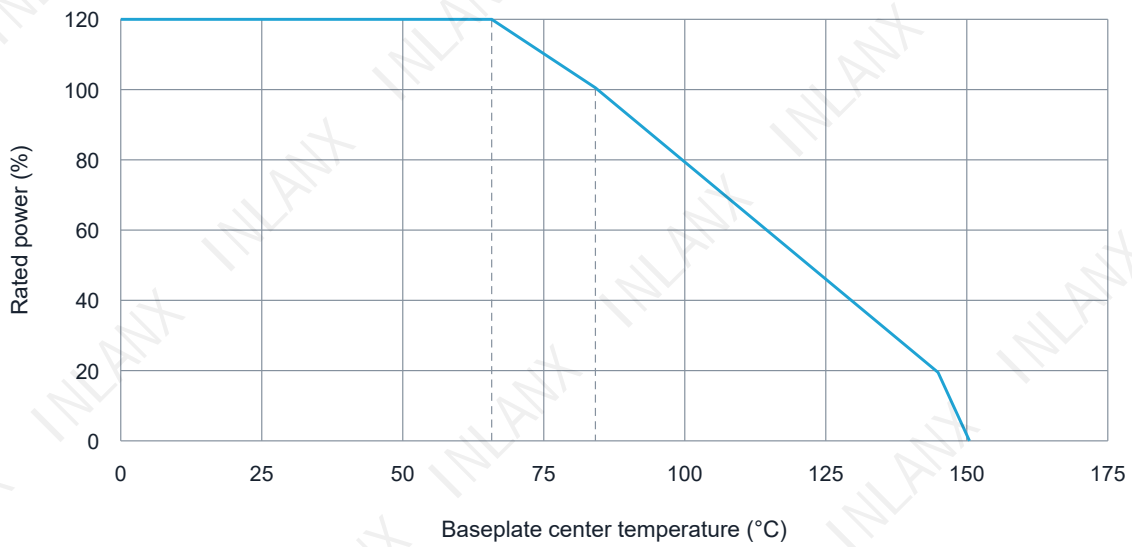
Tolerance: 5%

Special specifications can be customized by agreement.

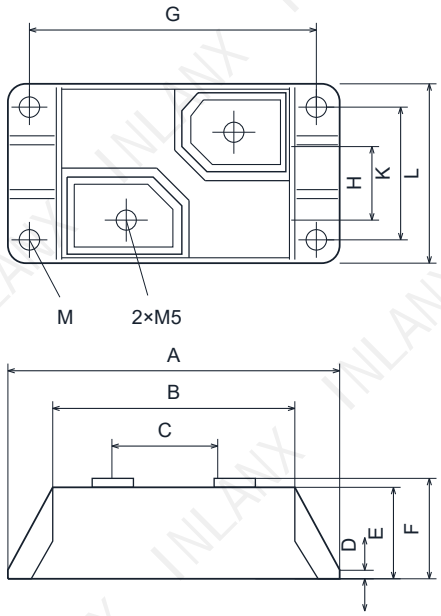
## Applicable Standards

IEC60115-1:2001(GB/T5729-2003)
MIL-STD-202
MIL-R-39009D

## Power Derating Curve



## Dimensions




| Dimension | Unit: mm (±0.5) |
|---|---|
| A | 66.0 |
| B | 45.5 |
| C | 23.5 |
| D | 1.9 |
| E | 20.5 |
| F | 22.5 |
| G | 57.0 |
| H | 16.5 |
| K | 29.0 |
| L | 40.0 |
| M | 4.1 |

## Main Technical Specifications

| Item | Specification |
|---|---|
| Resistance range | 1Ω~1MΩ |
| Resistance tolerance | ±5% ~ ±10% |
| Temperature coefficient | ±150PPM/°C (25°C ~ 105°C); other requirements by agreement |
| Baseplate center ≤85°C | Rated power: 400W |
| Max. working voltage | 5000VDC |
| Peak current | Up to 1500 Amp at low resistance and short pulse widths |
| Insulation withstand | 6KVDC, 50Hz, 1min; up to 10KVDC on request |
| Inductance | ≤400nH |
| Insulation resistance | 500V, minimum 10GΩ |
| Creepage distance | 42 mm |
| Moisture resistance | 56 days / 40°C, RH≥95%, ΔR ≤ ±(0.25%+0.001Ω) |
| Operating temperature | -55℃~150℃ |
| Temperature cycling | -55°C / +125°C (0.5h each), 5 cycles; ΔR ≤ ±(0.2%+0.001Ω) |
| High-frequency vibration | MIL-Std-202, Method 204, condition D; ΔR ≤ ±(0.2%+0.001Ω) |
| Short-time overload | 600W, 70°C, 10 seconds; ΔR ≤ ±(0.4%+0.0012) |
| Terminal mounting | M5 screws, maximum torque 2Nm |
| Resistor mounting | M4 screws, maximum torque 1.8Nm |
| Distributed capacitance | (MASS) ≤110pF; (PARALLEL) ≤40pF |