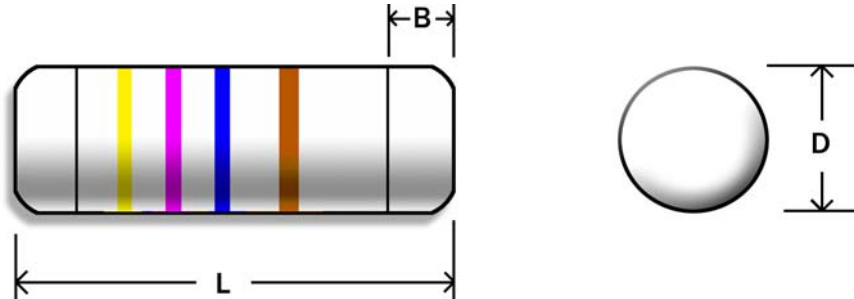


SFP- Stabilized Film Power MELF Resistor

Features

- Low Temperature Coefficient and Tolerances
- Excellent Stability
- Superior Power Handling



Dimensions

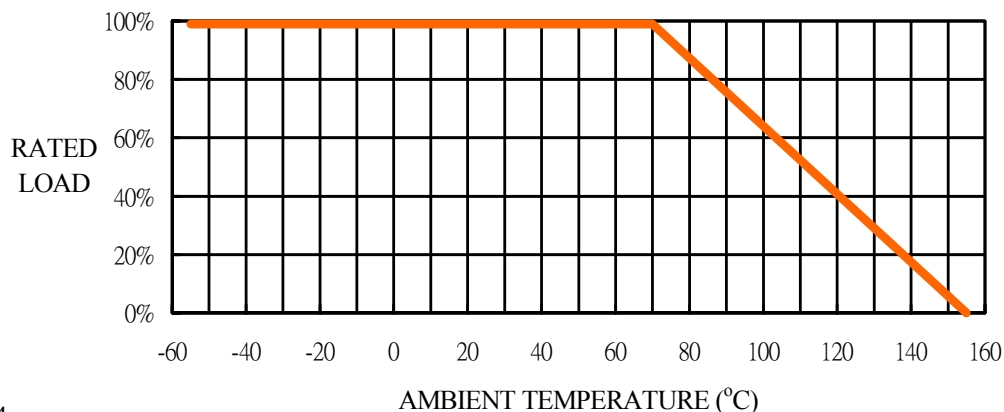
| Type | Body Length (L) | Body Diameter (D) | Soldering Spot (B) | Net Weight Per 1000 pcs |
|--------|-----------------|-------------------|--------------------|-------------------------|
| SFP204 | 3.45 ± 0.1 mm | 1.35 ± 0.1 mm | 0.6 mm min. | 17 grams |
| SFP101 | 5.90 ± 0.2 mm | 2.20 ± 0.1 mm | 1.0 mm min. | 66 grams |
| SFP201 | 8.50 ± 1.0 mm | 3.00 ± 0.2 mm | 1.3 mm min. | 186 grams |

General Specifications

| Type | Power Rating (at 70°C) | Max. Working Voltage | Max. Overload Voltage | Resistance Range Min. | Resistance Range Max. | Resistance Tolerance | Standard Resistance Value |
|--------|------------------------|----------------------|-----------------------|-----------------------|-----------------------|----------------------|---------------------------|
| SFP204 | 1/2W | 200V | 400V | 0.5Ω | 10MΩ | ±0.5%~5% | E-24/96 |
| SFP101 | 1W | 350V | 700V | 0.5Ω | 10MΩ | ±0.5%~5% | E-24/96 |
| SFP201 | 2W | 400V | 800V | 0.5Ω | 1MΩ | ±0.5%~5% | E-24/96 |

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

POWER DERATING CURVE



May. 26, 2004

SFP- Stabilized Film Power MELF Resistor

Technical Summary:

| Characteristics | Limits | | |
|--|---------------------------------------|-------------|-------------|
| Dielectric Withstanding Voltage, VAC or DC | SFP204: 200 | SFP101: 500 | SFP201: 700 |
| Temperature Coefficient, PPM / °C | ±50, ±100, ±200 | | |
| Operating Temperature Range, °C | -55 ~ +155 | | |
| Insulation Resistance, MΩ | >10 ⁵ | | |
| Voltage Coefficient, PPM / V | <25 | | |
| Failure Rate | <5 pcs / 10 ⁹ Device Hours | | |

Performance Specifications

| Test Characteristics | Test Conditions | Limits |
|------------------------------|--|----------------|
| Short Time Overload | IEC 60115-1 4.13 2 seconds 2.5x rated voltage (not over max. overload voltage) | ±(0.5%+0.05R) |
| Load Life In Humidity | IEC 60115-1 4.24 56 days at 40°C and 93% relative humidity | ±(0.5%+0.05R) |
| Load Life 1,000 hours | IEC 60115-1 4.25.1 Rated load 1.5 hours ON, 0.5 hours OFF, at 70°C | ±(0.5%+0.05R) |
| Resistance To Soldering Heat | IEC 60115-1 4.18 10 seconds at 260°C solder bath temperature | ±(0.25%+0.05R) |
| Solderability | MIL-STD-202 Method 208 Solder area covered after 230±5°C/5±0.5 seconds w/ flux applied | 95% Min. |
| Vibration | IEC 60115 4.22 Six hours in each parallel and axial direction w/ a simple harmonic motion having an amplitude of 0.75mm and 10 to 500 Hz. | ±(0.5%+0.05R) |
| Terminal Endurance | IEC 60115-1 4.25.3 1000 hours at 155°C without load | ±(0.5%+0.05R) |
| Thermal Shock | IEC 60115-1 4.19 -55°C 30minutes, +155°C 30minutes, 5 cycles | ±(0.1%+0.05R) |

Ordering Information

| Type | Tolerance | Temperature Coefficient | Resistance Value | Packaging | Special Request (Optional) |
|------------------|------------------------------|-------------------------|------------------|-----------|----------------------------|
| SFP101 SFP201 | D (0.5%) F (1%) J (5%) | TK200 | 10K | B TR | LV (Low value) |

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