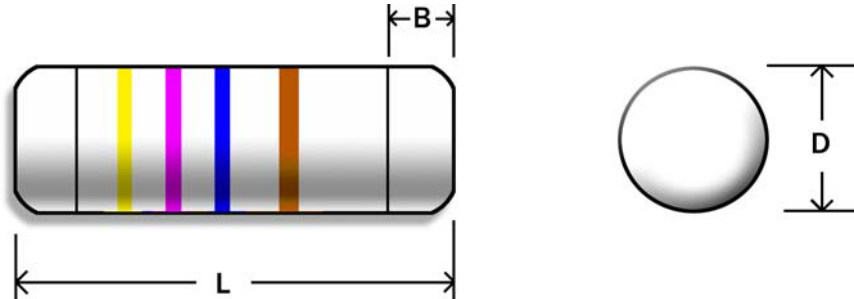


# SFP- Stabilized Film Power MELF Resistor

## Features

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



## Dimensions

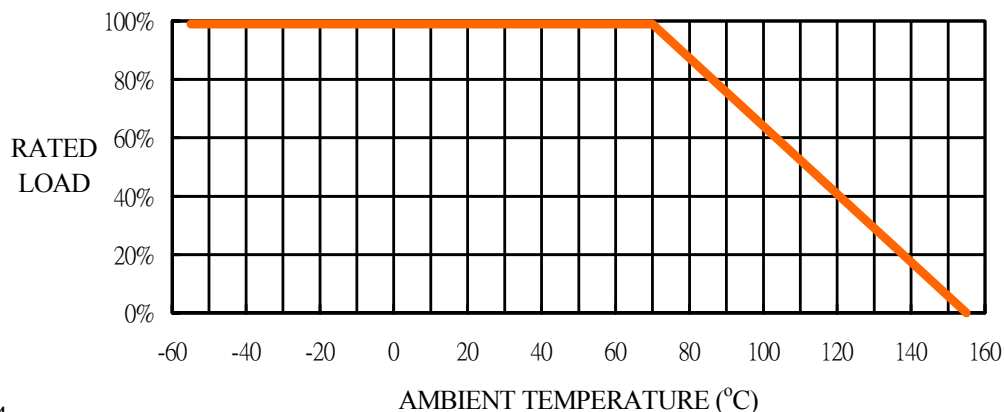
Type	Body Length (L)	Body Diameter (D)	Soldering Spot (B)	Net Weight Per 1000 pcs
SFP204	3.45 ± 0.1 mm	1.35 ± 0.1 mm	0.6 mm min.	17 grams
SFP101	5.90 ± 0.2 mm	2.20 ± 0.1 mm	1.0 mm min.	66 grams
SFP201	8.50 ± 1.0 mm	3.00 ± 0.2 mm	1.3 mm min.	186 grams

## 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 <sup>5</sup>		
Voltage Coefficient, PPM / V	<25		
Failure Rate	<5 pcs / 10 <sup>9</sup> 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)

May. 26, 2004