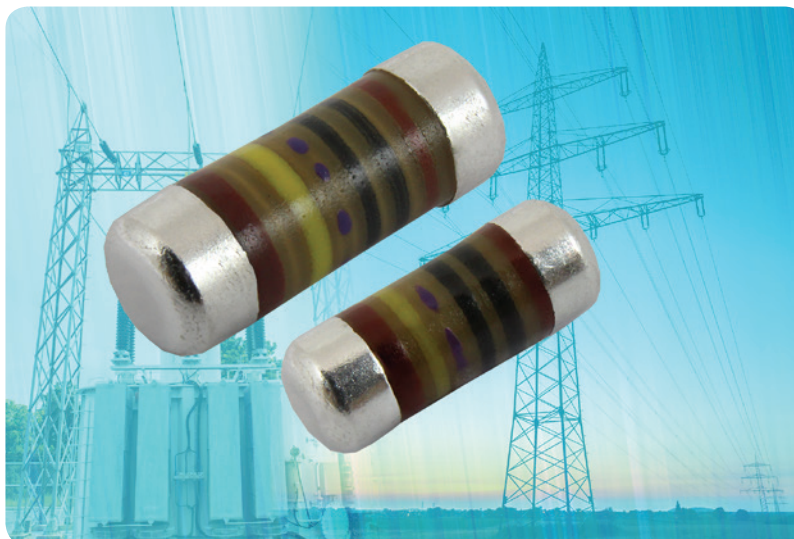




THIN FILM MELF RESISTORS

MMA 0204 HV; MMB 0207 HV - Professional

Professional High-Voltage Thin Film MELF Resistors



KEY BENEFITS

- Operating voltage up to 1000 V
- Robust design
- Advanced thin film technology

APPLICATIONS

- Lighting ballasts and LED drivers
- Industrial inverters and converters
- Battery management systems

RESOURCES

- Datasheet: MMA 0204 HV; MMB 0207 HV - Professional - www.vishay.com/doc?28880
- For technical questions contact melf@vishay.com
- Material categorization: For definitions please see www.vishay.com/doc?99912



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THIN FILM MELF RESISTORS

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Professional High-Voltage Thin Film MELF Resistors



MMA 0204 HV and MMB 0207 HV professional thin film MELF resistors are the perfect choice for most fields of modern professional electronics where reliability and stability are of major concern. The devices' typical applications in the fields of lighting and medical equipment reflect the outstanding level of proven reliability.

FEATURES

- High operating voltage, $U_{max.} = 1000\text{ V}$
- Advanced metal film technology
- Matte Sn termination on Ni barrier layer
- Material categorization:
for definitions of compliance please see www.vishay.com/doc?99912

APPLICATIONS

- Lighting
- Industrial
- Medical equipment

TECHNICAL SPECIFICATIONS			
DESCRIPTION	MMA 0204 HV	MMB 0207 HV	
DIN size	0204	0207	
Metric CECC size	RC 3715M	RC 6123M	
Resistance range	340 k Ω to 10 M Ω	340 k Ω to 10 M Ω	
Resistance tolerance	$\pm 1\%$	$\pm 1\%$	
Temperature coefficient	$\pm 50\text{ ppm/K}$	$\pm 50\text{ ppm/K}$	
Voltage coefficient	TBD	TBD	
Rated dissipation, P_{70} ⁽¹⁾	0.4 W	1.0 W	
Operating voltage, $U_{max. AC/DC}$	500 V	1000 V	
Operating temperature range	-55 °C to 155 °C	-55 °C to 155 °C	
Permissible voltage against ambient (insulation):			
	1 min, U_{ins}	300 V	500 V
	Continuous	75 V	75 V

Note

⁽¹⁾ Please refer to APPLICATION INFORMATION below.

APPLICATION INFORMATION

The power dissipation on the resistor generates a temperature rise against the local ambient, depending on the heat flow support of the printed circuit board (thermal resistance). The rated dissipation applies only if the permitted film temperature is not exceeded. Furthermore, a high level of ambient temperature or of power dissipation may raise the temperature of the solder joint, hence special solder alloys or board materials may be required to maintain the reliability of the assembly. The applicable voltage is limited by maximum power.

These resistors do not feature a limited lifetime when operated within the permissible limits. However, resistance value drift increasing over operating time may result in exceeding a limit acceptable to the specific application, thereby establishing a functional lifetime. At the maximum permissible film temperature of 155 °C the useful lifetime is specified for 8000 h. The designer may estimate the performance of the particular resistor application or set certain load and temperature limits in order to maintain a desired stability.