



MELF RESISTORS

MMA 0204 HT - Professional



Resistors - High Temperature, AEC-Q200 Qualified

Professional High-Temperature MELF Resistors



KEY BENEFITS

- Operating temperature 175 °C for 1000 h
- Advanced thin film technology
- Excellent overall stability: exceeds class 0.25
- AEC-Q200 qualified
- Approval to EN 140401-803
- Pure Sn termination on Ni barrier layer
- Green product, supports lead (Pb)-free soldering
- Compliant to RoHS directive 2011/65/EU

APPLICATIONS

- Automotive
- Telecommunication
- Industrial
- Medical equipment

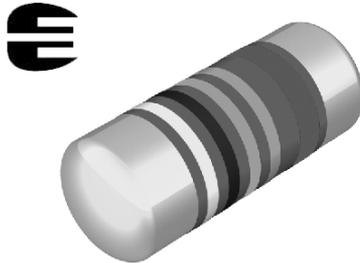
RESOURCES

- Datasheet: MMA 0204 HT - Professional - <http://www.vishay.com/doc?28780>
- For technical questions contact melf@vishay.com

One of the World's Largest Manufacturers of
Discrete Semiconductors and Passive Components



Professional High-Temperature MELF Resistors



MMA 0204 professional High Temperature MELF resistors are the perfect choice for most fields of modern professional electronics where high operating temperatures, power rating, reliability and stability is of major concern. These improved properties are enabled by a modified resistive film material. The typical applications in the fields of automotive and industrial equipment reflect the outstanding level of proven reliability.

FEATURES

- 175 °C specified operating temperature
- AEC-Q200 qualified
- Advanced thin film technology
- Excellent stability, < 0.1 %
- Matte Sn termination on Ni barrier layer
- Compliant to RoHS Directive 2011/65/EU

 AUTOMOTIVE
GRADE

RoHS
COMPLIANT

APPLICATIONS

- Automotive
- Industrial

METRIC SIZE

DIN	0204
CECC	RC 3715M

TECHNICAL SPECIFICATIONS

DESCRIPTION	MMA 0204 HT	
CECC size	RC 3715M	
Resistance range	47 Ω to 100 kΩ; 0 Ω	
Resistance tolerance	± 1 %; ± 0.5 %	
Temperature coefficient	± 50 ppm/K; ± 25 ppm/K	
Rated dissipation, P_{70} ⁽¹⁾	0.5 W	
Operating voltage, U_{max} AC/DC	200 V	
Permissible film temperature, θ_F max. ⁽²⁾	175 °C	
Operating temperature range ⁽²⁾	- 55 °C to 175 °C	
Insulation voltage	1 min; U_{ins}	300 V
	Continuous	75 V
Failure rate: FIT _{observed}	≤ 0.1 x 10 ⁻⁹ /h	

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Notes

⁽¹⁾ 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.

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.

⁽²⁾ Please refer to APPLICATION INFORMATION below.