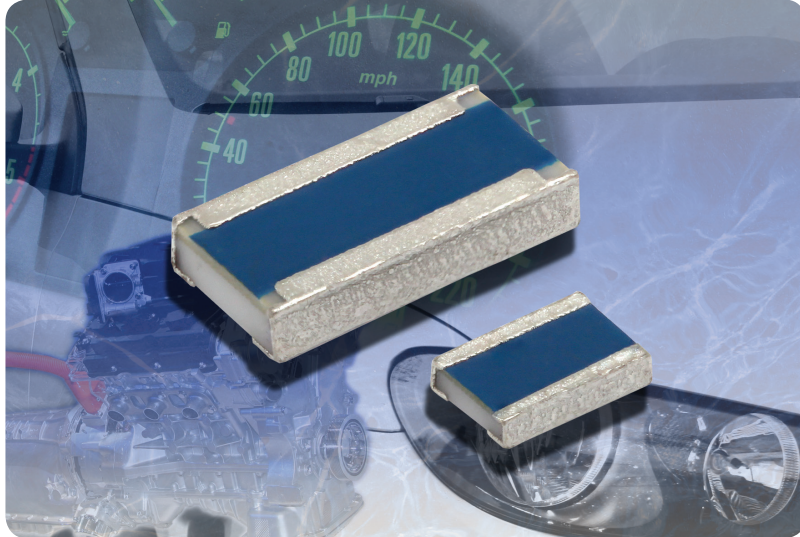


THIN FILM CHIP RESISTORS

MCW AT Professional and Precision

Professional and Precision Wide Terminal Thin Film Chip Resistors



KEY BENEFITS

- Size 0406 and 0612 thin film chip resistor with wide side termination
- High power dissipation in compact case sizes: P_{85} up to 1 W
- Resistance range down to 1 Ω
- Extraordinary thermal cycling robustness up to 3000 cycles
- Operating temperature up to 175 °C
- Robust design provides long-term stability and resistance against humidity and corrosive atmospheres
- AEC-Q200 qualified

APPLICATIONS

- High power and high temperature applications
- Automotive and industrial applications
- Replacement for larger case sizes

END PRODUCTS

- Automotive electronics: control units, braking systems, lighting
- Industrial electronics: energy management, power supplies, measurement
- Inverters for automotive, industrial, and home appliances
- High end computers

RESOURCES

- Datasheet: MCW AT – Professional - www.vishay.com/doc?28796
- Datasheet: MCW 0406 AT – Precision - www.vishay.com/doc?28847
- For technical questions contact thinfilmttechsupport@vishay.com



THIN FILM CHIP RESISTORS

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MCW AT Professional and Precision Wide Terminal Resistors are the perfect choice for most fields of modern professional power measurement electronics where reliability, stability, power dissipation, and robust design is of major concern.

Besides extremely high power ratings, the MCW AT is characterized by extraordinary temperature cycling robustness, verified through extensive testing. Typical applications include power electronics in automotive and industrial appliances.

FEATURES

- Rated dissipation P_{85} up to 1 W
- Superior temperature cycling robustness
- Operating temperature up to 175 °C
- AEC-Q200 qualified
- Advanced sulfur resistance verified according to ASTM B 809



APPLICATIONS

- Automotive
- Industrial
- High power and high temperature applications
- Replacement for larger case sizes

TECHNICAL SPECIFICATIONS			
DESCRIPTION	MCW 0406 AT Precision	MCW 0406 AT Professional	MCW 0612 AT Professional
Imperial size	0406	0406	0612
Metric size code	RR1016M	RR1016M	RR1632M
Resistance range	1 Ω to 100 k Ω	1 Ω to 100 k Ω	10 Ω to 100 k Ω
Resistance tolerance	± 0.1 %	± 0.5 %; ± 1 %	± 0.5 %; ± 1 %
Temperature coefficient	± 15 ppm/K; ± 25 ppm/K	± 25 ppm/K; ± 50 ppm/K	± 25 ppm/K; ± 50 ppm/K
Rated dissipation P_{70} or P_{85} ⁽¹⁾	0.25 W	0.3 W	1.0 W
Operating voltage, U_{max} , AC _{RMS} /DC	50 V	50 V	75 V
Permissible film temperature, ϑ_F max. ⁽¹⁾	155 °C	175 °C	175 °C
Operating temperature range ⁽¹⁾	-55 °C to 155 °C	-55 °C to 175 °C	-55 °C to 175 °C
Insulation voltage: 1 min; U_{ins}	75 V	75 V	100 V

Revision 1-Sept-16

Note: ⁽¹⁾ Please refer to APPLICATION INFORMATION, please see www.vishay.com/doc?28796 (professional) or www.vishay.com/doc?28847 (precision). Rated dissipation P_{85} applies to MCW AT - Professional Series.