Precision Gold Terminated Thin Film Chip Resistors for Conductive Gluing

KEY BENEFITS

- Gold terminations for conductive gluing
- For high-temperature applications
- Tight tolerances down to ± 0.1 %
- 0402 and 0603 case sizes

APPLICATIONS

- Automotive and industrial applications
- Industrial electronics: energy management, measurement and control technology
- Automotive electronics: engine control unit, gear box control, safety, power supply electronics, body electronics, braking systems, lighting

RESOURCES

- Datasheet: MC ATAU - http://www.vishay.com/doc?28877
- For technical questions contact thinfilmchip@vishay.com

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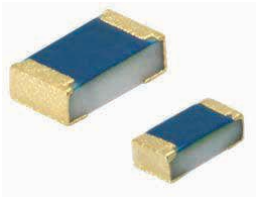

The MC Series automotive thin film chip resistors are designed for conductive gluing technology. They are the perfect choice for most fields of modern precision electronics where reliability and stability are of major concern. Typical applications include automotive as well as industrial systems.

FEATURES

AUTOMOTIVE GRADE

Pb RoHS COMPLIANT

- Gold terminations for conductive gluing
- Superior temperature cycling robustness
- Superior moisture resistivity, $|\Delta R/R| < 0.5$ % (85 °C; 85 % RH; 1000 h)
- AEC-Q200 qualified
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

APPLICATIONS

- Automotive
- Precision analog circuits
- Hybrid circuits

METRIC SIZE		
INCH	0402	0603
METRIC	RR 1005M	RR 1608M

TECHNICAL SPECIFICATIONS		
DESCRIPTION	**MCS 0402 ATAU**	**MCT 0603 ATAU**
DIN size	0402	0603
Metric size	RR 1005M	RR 1608M
Resistance range	100 Ω to 47 kΩ	100 Ω to 100 kΩ
Resistance tolerance	± 0.1 %	± 0.1 %
Temperature coefficient	± 25 ppm/K; ± 15 ppm/K	± 25 ppm/K; ± 15 ppm/K
Rated dissipation, P_{70}	0.1 W	0.125 W
Operating voltage, $U_{max.}$ AC/DC	50 V	75 V
Permissible film temperature, ϑ_F max.	155 °C	
Operating temperature range	- 55 °C to 155 °C	
Insulation voltage		
1 min; U_{ins}	75 V	100 V
Continuous	75 V	75 V
Failure rate: $FIT_{observed}$	≤ 0.1 x 10^{-9}/h	

Revision 23-May-14

Notes

(1) An appropriate thermal resistance Rth has to be realized by adequate gluing connection and board material.

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