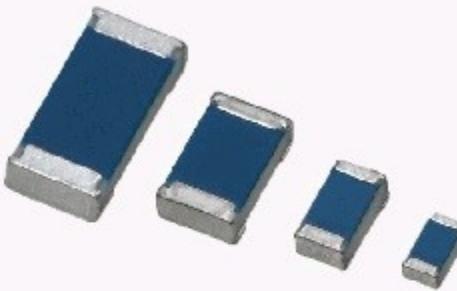




Precision Thin Film Chip Resistors



FEATURES

- Rated dissipation P_{70} up to 0.4 W for size 1206
- AEC-Q200 qualified
- Approved to EN 140401-801
- Superior temperature cycling robustness
- Waste gas resistance verified by ASTM B 809
- Superior temperature cycling robustness
- Lead (Pb)-free solder contacts
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912

AUTOMOTIVE

RoHS
COMPLIANT

Automotive-grade MC AT precision thin film chip resistors are the perfect choice for most fields of modern precision electronics where reliability and stability is of major concern. Typical applications include automotive, industrial, telecommunication, medical equipment, precision test and measuring equipment.

APPLICATIONS

- Automotive
- Telecommunication
- Medical equipment
- Industrial equipment

TECHNICAL SPECIFICATIONS

	MCS 0402 AT	MCT 0603 AT	MCU 0805 AT	MCA 1206 AT
Imperial size	0402	0603	0805	1206
Metric size code	RR1005M	RR1608M	RR2012M	RR3216M
Resistance range ⁽¹⁾	47 Ω to 221 kΩ	47 Ω to 511 kΩ	47 Ω to 1 MΩ	47 Ω to 1 MΩ
Resistance tolerance		± 0.1 %		
Temperature coefficient		+ 25 ppm/K; + 15 ppm/K; - 10 ppm/K		
Rated dissipation P_{70} ⁽²⁾	0.100 W	0.125 W	0.200 W	0.400 W
Operating voltage, U_{max} , AC/DC	50 V	75 V	150 V	200 V
Permissible film temperature, θ_f max. ⁽²⁾		155 °C		
Operating temperature range		- 55 °C to 155 °C		
Insulation voltage				
1 min; U_{int}	75 V	100 V	200 V	300 V
Continuous	75 V	75 V	75 V	75 V
Failure rate, FIT, cleaned			≤ 0.1 × 10 ⁻⁶ /h	

Notes

⁽¹⁾ The AEC-Q200 qualification of the extended ranges (> 100 kΩ; > 47 kΩ for 0402) is pending.

⁽²⁾ Please refer to APPLICATION INFORMATION next page.