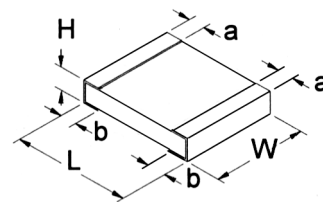


HMC Series — General Purpose High Value Chip Resistors

Features

- R Value extension of RMC product
- Operating temperature range from -55°C to +150°C
- Power derating from 100% at 70°C to zero at 150°C
- Highly stable performance over time
- E12 values only
- Nickel barrier terminations
- RoHS compliant / lead-free



Electrical Specifications

| Type / Code | Package Type | Power Rating (Watts) @ 70°C | Maximum Working Voltage* | Maximum Overload Voltage | Resistance Temperature Coefficient | Ohmic Range and Tolerance | |
|-------------|--------------|-----------------------------|--------------------------|--------------------------|------------------------------------|---------------------------|-------------------------|
| | | | | | | 10% | 20% |
| HMC 1/16 | 0603 | 0.063W | 50 | 100 | ±500 ppm/°C ±1,500 ppm/°C | 47M – 1G 1.2G – 3.3G | 47M – 1G 1.2G – 3.3G |
| HMC 1/10 | 0805 | 0.1W | 75 | 150 | ±500 ppm/°C ±1,500 ppm/°C | 47M – 1G 1.2G – 4.7G | 47M – 1G 1.2G – 4.7G |
| HMC 1/8 | 1206 | 0.125W | 150 | 300 | ±500 ppm/°C ±1,500 ppm/°C | 47M – 1G 1.2G – 4.7G | 47M – 1G 1.2G – 4.7G |

* Lesser of \sqrt{PR} or maximum working voltage.

Mechanical Specifications

| Type / Code | L Body Length | W Body Width | H Body Height | a Top Termination | b Bottom Termination | Units |
|-------------|---|---|------------------------------|------------------------------|------------------------------|--------------|
| HMC 1/16 | 0.063 ± 0.006 1.60 ± 0.15 | 0.031 ± 0.006 0.80 ± 0.15 | 0.018 ± 0.004 0.45 ± 0.10 | 0.012 ± 0.008 0.30 ± 0.20 | 0.012 ± 0.008 0.30 ± 0.20 | inches mm |
| HMC 1/10 | 0.079 ± 0.008 2.00 ± 0.20 | 0.049 ± 0.008 1.25 ± 0.20 | 0.020 ± 0.004 0.50 ± 0.10 | 0.016 ± 0.008 0.40 ± 0.20 | 0.016 ± 0.008 0.40 ± 0.20 | inches mm |
| HMC 1/8 | 0.126 +0.002/-0.008 3.20 +0.05/-0.20 | 0.063 +0.002/-0.006 1.60 +0.05/-0.15 | 0.024 ± 0.004 0.60 ± 0.10 | 0.020 ± 0.010 0.50 ± 0.25 | 0.020 ± 0.012 0.50 ± 0.30 | inches mm |

Performance Characteristics

| Test | Test Conditions (JIS C 5202) | Test Results |
|-----------------------------------|--|--------------|
| Long Term Stability | Normal temperature & humidity for 1,000 hrs. | ±0.5% |
| High Temperature Loading | 15V _{DC} , 1.5 hr. On, 0.5 hr. Off, 1,000 hrs. 70°C | ±3% |
| Resistance to Solder Heat | 260°C ± 5°C, 10 seconds +1/-0 | ±1% |
| Short Time Overload | 5 seconds at maximum overload voltage | ±2% |
| Voltage Coefficient of Resistance | Per JIS C 5202 | ±0.5%/V |

How to Order

| HMC SEI Type | | | 1/10 Code | | | 47M Nominal Resistance | | 10% Tolerance | | R Packaging | | |
|-----------------|---------|------|--------------|--------|------|---------------------------|---------|------------------|--|----------------|--|--|
| Code | Wattage | Size | Tolerance | Values | Code | Description | Pkg Qty | | | | | |
| 1/16 | 0.063W | 0603 | 10% | E12 | R | 7" - Paper | 5,000 | | | | | |
| 1/10 | 0.1W | 0805 | 20% | E12 | | | | | | | | |
| 1/8 | 0.125W | 1206 | | | | | | | | | | |