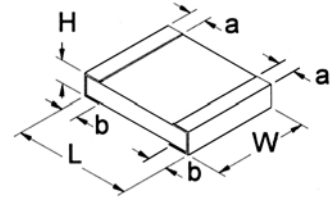


HMC Series — High Value Thick Film Chip Resistors

Features

- R Value extension of RMC product
- Operating temperature range from -55°C to +125°C
- Power derating from 100% at 70°C to zero at 125°C
- Highly stable performance over time
- E12 and E24 values
- 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
						5%, 10%, 20%
HMC 1/16	0603	0.063W	50V	100V	±500 ppm/°C ±1,500 ppm/°C	43MΩ – 1GΩ 1.2GΩ – 10GΩ
HMC 1/10	0805	0.100W	150V	300V	±500 ppm/°C ±1,500 ppm/°C	43MΩ – 1GΩ 1.2GΩ – 10GΩ
HMC 1/8	1206	0.125W	200V	400V	±500 ppm/°C ±1,500 ppm/°C	43MΩ – 1GΩ 1.2GΩ – 10GΩ

* 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	0.031 ± 0.006	0.018 ± 0.004	0.012 ± 0.008	0.012 ± 0.008	inches
	1.60 ± 0.15	0.80 ± 0.15	0.45 ± 0.10	0.30 ± 0.20	0.30 ± 0.20	mm
HMC 1/10	0.079 ± 0.008	0.049 ± 0.008	0.020 ± 0.004	0.016 ± 0.008	0.016 ± 0.008	inches
	2.00 ± 0.20	1.25 ± 0.20	0.50 ± 0.10	0.40 ± 0.20	0.40 ± 0.20	mm
HMC 1/8	0.126 +0.002/-0.008	0.063 +0.002/-0.006	0.024 ± 0.004	0.020 ± 0.010	0.020 ± 0.012	inches
	3.20 +0.05/-0.20	1.60 +0.05/-0.15	0.60 ± 0.10	0.50 ± 0.25	0.50 ± 0.30	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	SEI Types	Pkg Qty	Description	Code	
1/16	0.063W	0603	5%	E12	All	5,000	7" - Paper	R	
1/10	0.100W	0805	10%						
1/8	0.125W	1206	20%						