## Stackpole Electronics, Inc. Resistive Product Solutions

High Value Thick Film Chip Resistor

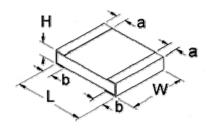
## Features:

- R Value extension of RMC product
- Highly stable performance over time
- Power derating from 100% at 70°C to zero at 125°C
- E12 and E24 values
- Nickel barrier terminations
- RoHS compliant / lead-free



Electrical Specifications									
Type / Code	Old Pkg Code	Power Rating (Watts) @ 70°C	Maximum Working Voltage (1)	Maximum Overload Voltage	Resistance Temperature	Ohmic Range $(\Omega)$ and Tolerance			
					Coefficient	1%	5%	10%	
HMC0402	1/16S	0.063W	50V	100V	±200 ppm/°C ±400 ppm/°C	10.2M - 20M 20.5M - 100M	- 30M - 100M	- 30M - 100M	
HMC0603	1/16	0.1W	50V	100V	±200 ppm/°C ±400 ppm/°C ±500 ppm/°C	10.2M - 20M 20.5M - 100M	- 30M - 100M 110M - 1G	- 30M - 100M 110M - 1G	
HMC0805	1/10	0.125W	150V	300V	±200 ppm/°C ±400 ppm/°C ±500 ppm/°C ±1000 ppm/°C ±1500 ppm/°C	10.2M - 20M 20.5M - 100M - - -	- 30M - 100M 110M - 500M 510M - 1G 1.2G - 10G	- 30M - 100M 110M - 500M 510M - 1G 1.2G - 10G	
HMC1206	1/8	0.25W	200V	400V	±200 ppm/°C ±400 ppm/°C ±500 ppm/°C ±1000 ppm/°C ±1500 ppm/°C	10.2M - 20M 20.5M - 100M - - -	- 30M - 100M 110M - 500M 510M - 1G 1.2G - 10G	- 30M - 100M 110M - 500M 510M - 1G 1.2G - 10G	
HMC1210	1/4	0.33W	200V	400V	±200 ppm/°C ±400 ppm/°C	10.2M - 20M 20.5M - 100M	- 22M - 100M	- 22M - 100M	
HMC2010	1/2	0.75W	200V	400V	±200 ppm/°C ±400 ppm/°C	10.2M - 20M 20.5M - 100M	11M - 20M 22M - 100M	11M - 20M 22M - 100M	
HMC2512	1	1W	250V	500V	±200 ppm/°C ±400 ppm/°C	10.2M - 20M 20.5M - 100M	11M - 20M 22M - 100M	11M - 20M 22M - 100M	

<sup>(1)</sup> Lesser of  $\sqrt{\text{PR}}$  or maximum working voltage.

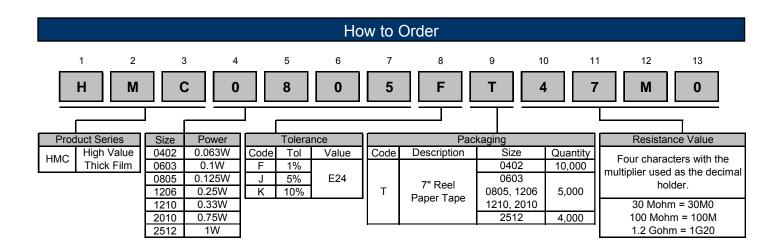


Mechanical Specifications									
Type / Code	L Body Length	W Body Width	H Body Height	a Top Termination	b Bottom Termination	Unit			
HMC0402	0.039 ± 0.002	0.02 ± 0.002	0.014 ± 0.002	0.008 ± 0.004	0.008 ± 0.004	inches			
	1 ± 0.05	0.5 ± 0.05	0.35 ± 0.05	0.2 ± 0.1	0.2 ± 0.1	mm			
HMC0603	0.063 ± 0.004	0.032 ± 0.004	0.018 ± 0.004	0.012 ± 0.008	0.012 ± 0.008	inches			
	1.6 ± 0.1	0.8 ± 0.1	0.45 ± 0.1	0.3 ± 0.2	0.3 ± 0.2	mm			
HMC0805	0.079 ± 0.008 2 ± 0.2			0.016 ± 0.008 0.4 ± 0.2	0.016 ± 0.008 0.4 ± 0.2	inches mm			
HMC1206	0.122 ± 0.006	0.061 ± 0.004	0.022 ± 0.006	0.02 ± 0.010	0.02 ± 0.008	inches			
	3.1 ± 0.15	1.55 ± 0.1	0.55 ± 0.15	0.5 ± 0.25	0.5 ± 0.2	mm			
HMC1210	0.126 ± 0.008	0.102 ± 0.006	0.022 ± 0.004	0.02 ± 0.008	0.02 ± 0.008	inches			
	3.2 ± 0.2	2.6 ± 0.15	0.55 ± 0.1	0.5 ± 0.2	0.5 ± 0.2	mm			
HMC2010	0.197 ± 0.008	0.098 ± 0.006	0.022 ± 0.004	0.024 ± 0.01	0.02 ± 0.008	inches			
	5 ± 0.2	2.5 ± 0.15	0.55 ± 0.1	0.6 ± 0.25	0.5 ± 0.2	mm			
HMC2512	0.25 ± 0.008	0.126 ± 0.006	0.022 ± 0.004	0.024 ± 0.01	0.02 ± 0.008	inches			
	6.35 ± 0.2	3.2 ± 0.15	0.55 ± 0.1	0.6 ± 0.25	0.5 ± 0.2	mm			

Performance Characteristics							
Test	Test Conditions (JIS C 5202)	Test Results					
Long Term Stability	Nominal temperature & humidity for 1,000 hrs.	± 0.5%					
High Temperature Loading	15VDC, 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					

Operating Temperature Range: -55°C to +125°C

Resistive Product Solutions



Legacy Part Number (before January 3, 2011):

SEI Type HMC			Code 1/10		Nominal Resistance 47M	Tolera			Packagi R	ng	
Туре	Description	Code	Wattage	Size		Tolerance	Values	SEI Types	Pkg Qty	Description	Code
HMC	High Value Thick Film	1/16S	0.063W	0402		1%		0402	10,000		R
		1/16	0.1W	0603		5%	E24	0603		7" reel	
		1/10	0.125W	0805		10%		0805, 1206	5 000	paper tape	R
		1/8	0.25W	1206				1210, 2010		рарсі тарс	
		1/4	0.33W	1210				2512	4,000		R
		1/2	0.75W	2010						_	
		1	1W	2512							