



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

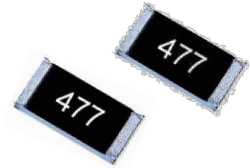
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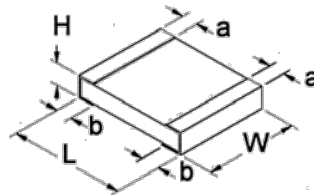


- Features:
- R Value extension of RMCF product
 - Highly stable performance over time
 - Power derating from 100% at 70°C to zero at 125°C
 - E12 and E24 values
 - Nickel barrier terminations
 - RoHS compliant / lead-free



Electrical Specifications								
Type / Code	Old Pkg Code	Power Rating (Watts) @ 70°C	Maximum Working Voltage (1)	Maximum Overload Voltage	Resistance Temperature Coefficient	Ohmic Range (Ω) and Tolerance		
						1%	5%	10%
HMC0402	1/16S	0.063W	50V	100V	±200 ppm/°C ±400 ppm/°C	11M - 20M 22M - 100M	- 22M - 100M	- 22M - 100M
HMC0603	1/16	0.1W	50V	100V	±200 ppm/°C ±400 ppm/°C ±500 ppm/°C	11M - 20M 22M - 100M -	- 30M - 100M 110M - 1G	- 30M - 100M 110M - 4.7G
HMC0805	1/10	0.125W	150V	300V	±200 ppm/°C ±400 ppm/°C ±500 ppm/°C ±1000 ppm/°C ±1500 ppm/°C	11M - 20M 22M - 100M - - -	- 30M - 100M 110M - 500M 510M - 1G 1.2G - 10G	- 33M - 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	11M - 20M 22M - 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	11M - 20M 22M - 100M	- 22M - 100M	11M - 20M 22M - 100M
HMC2010	1/2	0.75W	200V	400V	±200 ppm/°C ±400 ppm/°C	11M - 20M 22M - 100M	11M - 20M 22M - 100M	11M - 20M 22M - 100M
HMC2512	1	1W	250V	500V	±200 ppm/°C ±400 ppm/°C	11M - 20M 22M - 100M	11M - 20M 22M - 100M	11M - 20M 22M - 100M

(1) Lesser of √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 1 ± 0.05	0.02 ± 0.002 0.5 ± 0.05	0.014 ± 0.002 0.35 ± 0.05	0.008 ± 0.004 0.2 ± 0.1	0.008 ± 0.004 0.2 ± 0.1	inches mm
HMC0603	0.063 ± 0.004 1.6 ± 0.1	0.032 ± 0.004 0.8 ± 0.1	0.018 ± 0.004 0.45 ± 0.1	0.012 ± 0.008 0.3 ± 0.2	0.012 ± 0.008 0.3 ± 0.2	inches mm
HMC0805	0.079 ± 0.008 2 ± 0.2	0.049 ± 0.004 1.25 ± 0.1	0.02 ± 0.004 0.5 ± 0.1	0.016 ± 0.008 0.4 ± 0.2	0.016 ± 0.008 0.4 ± 0.2	inches mm
HMC1206	0.122 ± 0.006 3.1 ± 0.15	0.061 ± 0.004 1.55 ± 0.1	0.022 ± 0.006 0.55 ± 0.15	0.02 ± 0.010 0.5 ± 0.25	0.02 ± 0.008 0.5 ± 0.2	inches mm
HMC1210	0.126 ± 0.008 3.2 ± 0.2	0.102 ± 0.006 2.6 ± 0.15	0.022 ± 0.004 0.55 ± 0.1	0.02 ± 0.008 0.5 ± 0.2	0.02 ± 0.008 0.5 ± 0.2	inches mm
HMC2010	0.197 ± 0.008 5 ± 0.2	0.098 ± 0.006 2.5 ± 0.15	0.022 ± 0.004 0.55 ± 0.1	0.024 ± 0.01 0.6 ± 0.25	0.02 ± 0.008 0.5 ± 0.2	inches mm
HMC2512	0.25 ± 0.008 6.35 ± 0.2	0.126 ± 0.006 3.2 ± 0.15	0.022 ± 0.004 0.55 ± 0.1	0.024 ± 0.01 0.6 ± 0.25	0.02 ± 0.008 0.5 ± 0.2	inches mm

HMC Series

High Value Thick Film Chip Resistor

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

How to Order

1	2	3	4	5	6	7	8	9	10	11	12	13
H	M	C	0	8	0	5	F	T	4	7	M	0
Product Series		Size	Power	Tolerance			Packaging			Resistance Value		
HMC	High Value Thick Film	0402	0.063W	Code	Tol	Value	Code	Description	Size	Quantity	Four characters with the multiplier used as the decimal holder.	
		0603	0.1W	F	1%	E24	T	7" Reel Paper Tape	0402	10,000	30 Mohm = 30M0	
		0805	0.125W	J	5%				0603, 0805	5,000	100 Mohm = 100M	
		1206	0.25W	K	10%			1206, 1210	4,000	1.2 Gohm = 1G20		
		1210	0.33W					7" Reel Plastic Tape	2010			
		2010	0.75W						2512			
		2512	1W									

Legacy Part Number (before January 3, 2011):

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