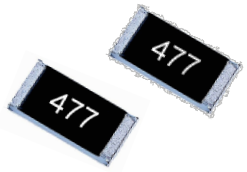
Features:

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



Electrical Specifications

Type / Code	Power Rating (Watts) @ 70ºC	Maximum Working Voltage (1)	Maximum Overload Voltage	Resistance Temperature Coefficient	Ohmic Range (Ω) and Tolerance		
					1%	5%	10%
HMC0402	0.063W	50V	100V	±200 ppm/ºC	11M - 20M	-	
				±400 ppm/ºC	22M - 100M		
HMC0603	0.1W	50V	100V	±200 ppm/ºC	11M - 20M	-	
				±400 ppm/ºC	22M - 100M	30M - 100M	
				±500 ppm/ºC	-	110M - 1G	110M - 4.7G
HMC0805	0.125W	150V	300V	±200 ppm/ºC	11M - 20M	-	
				±400 ppm/ºC	22M - 100M	30M - 100M	33M - 100M
				±500 ppm/ºC	-	110M - 500M	
				±1000 ppm/ºC		510M - 1G	
				±1500 ppm/ºC		1.2G - 10G	
HMC1206	0.25W	200V	400V	±200 ppm/ºC	11M - 20M	-	
				±400 ppm/ºC	22M - 100M	30M - 100M	
				±500 ppm/ºC	-	110M - 500M	
				±1000 ppm/ºC		510M - 1G	
				±1500 ppm/ºC		1.2G - 10G	
HMC1210	0.33W	200V	400V	±200 ppm/ºC	11M - 20M	-	11M - 20M
				±400 ppm/ºC	22M - 100M		
HMC2010	0.75W	200V	400V	±200 ppm/ºC	11M - 20M		
				±400 ppm/ºC	22M - 100M		
HMC2512	1W	250V	500V	±200 ppm/ºC	11M - 20M		
				±400 ppm/ºC	22M - 100M		

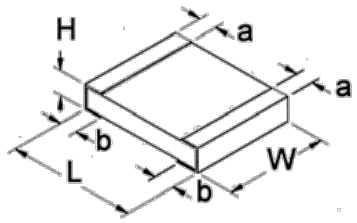
(1) Lesser of √PR or maximum working voltage.

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. 70ºC	± 3%
Resistance to Solder Heat	260ºC ± 5ºC, 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

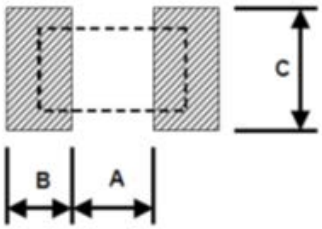
Operating Temperature Range: -55ºC to +125ºC

Mechanical Specifications



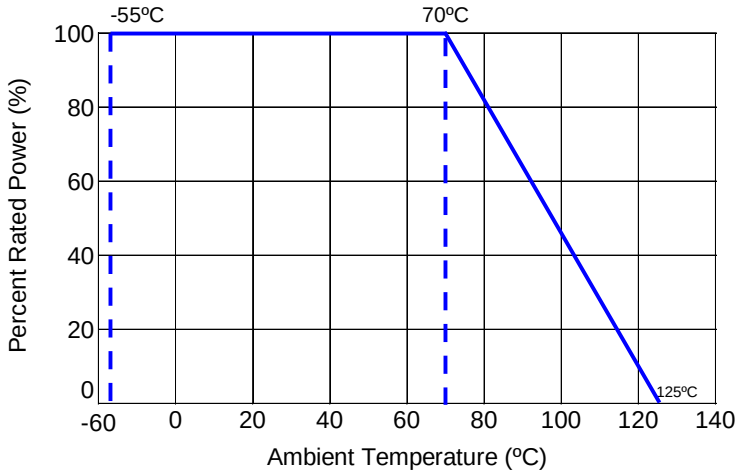
Type / Code	L Body Length	W Body Width	H Body Height	a Top Termination	b Bottom Termination	Unit
HMC0402	0.039 ± 0.002 1.00 ± 0.05	0.020 ± 0.002 0.50 ± 0.05	0.014 ± 0.002 0.35 ± 0.05	0.008 ± 0.004 0.20 ± 0.10	0.008 ± 0.004 0.20 ± 0.10	inches mm
HMC0603	0.063 ± 0.004 1.60 ± 0.10	0.031 ± 0.004 0.80 ± 0.10	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
HMC0805	0.079 ± 0.008 2.00 ± 0.20	0.049 ± 0.004 1.25 ± 0.10	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
HMC1206	0.122 ± 0.006 3.10 ± 0.15	0.061 ± 0.004 1.55 ± 0.10	0.022 ± 0.006 0.55 ± 0.15	0.020 ± 0.010 0.50 ± 0.25	0.020 ± 0.008 0.50 ± 0.20	inches mm
HMC1210	0.126 ± 0.008 3.20 ± 0.20	0.102 ± 0.006 2.60 ± 0.15	0.022 ± 0.004 0.55 ± 0.10	0.020 ± 0.008 0.50 ± 0.20	0.020 ± 0.008 0.50 ± 0.20	inches mm
HMC2010	0.197 ± 0.008 5.00 ± 0.20	0.098 ± 0.006 2.50 ± 0.15	0.022 ± 0.004 0.55 ± 0.10	0.024 ± 0.010 0.60 ± 0.25	0.020 ± 0.008 0.50 ± 0.20	inches mm
HMC2512	0.250 ± 0.008 6.35 ± 0.20	0.126 ± 0.006 3.20 ± 0.15	0.022 ± 0.004 0.55 ± 0.10	0.024 ± 0.010 0.60 ± 0.25	0.020 ± 0.008 0.50 ± 0.20	inches mm

Recommended Pad Layout



Type/Code	A	B	C	Unit
HMC0402	0.020 0.50	0.018 0.45	0.024 0.60	inches mm
HMC0603	0.035 0.90	0.024 0.60	0.035 0.90	inches mm
HMC0805	0.047 1.20	0.028 0.70	0.051 1.30	inches mm
HMC1206	0.079 2.00	0.035 0.90	0.063 1.60	inches mm
HMC1210	0.079 2.00	0.035 0.90	0.110 2.80	inches mm
HMC2010	0.150 3.80	0.035 0.90	0.110 2.80	inches mm
HMC2512	0.193 4.90	0.063 1.60	0.138 3.50	inches mm

Power Derating Curve:



RoHS Compliance

Stackpole Electronics has joined the worldwide effort to reduce the amount of lead in electronic components and to meet the various regulatory requirements now prevalent, such as the European Union's directive regarding "Restrictions on Hazardous Substances" (RoHS 2). As part of this ongoing program, we periodically update this document with the status regarding the availability of our compliant components. All our standard part numbers are compliant to EU Directive 2011/65/EU of the European Parliament.

RoHS Compliance Status						
Standard Product Series	Description	Package / Termination Type	Standard Series RoHS Compliant	Lead-Free Termination Composition	Lead-Free Mfg. Effective Date (Std Product Series)	Lead-Free Effective Date Code (YY/WW)
HMC	High Value Thick Film Surface Mount Chip Resistor	SMD	YES(1)	100% Matte Sn over Ni	Jan-04	04/01

Note (1): RoHS Compliant by means of exemption 7c-I.

"Conflict Metals" Commitment

We at Stackpole Electronics, Inc. are joined with our industry in opposing the use of metals mined in the "conflict region" of the Eastern Democratic Republic of the Congo (DRC) in our products. Recognizing that the supply chain for metals used in the electronics industry is very complex, we work closely with our own suppliers to verify to the extent possible that the materials and products we supply do not contain metals sourced from this conflict region. As such, we are in compliance with the requirements of Dodd-Frank Act regarding Conflict Minerals.

Compliance to "REACH"

We certify that all passive components supplied by Stackpole Electronics, Inc. are SVHC (Substances of Very High Concern) free and compliant with the requirements of EU Directive 1907/2006/EC, "The Registration, Evaluation, Authorization and Restriction of Chemicals", otherwise referred to as REACH. Contact us for complete list of REACH Substance Candidate List.

Environmental Policy

It is the policy of Stackpole Electronics, Inc. (SEI) to protect the environment in all localities in which we operate. We continually strive to improve our effect on the environment. We observe all applicable laws and regulations regarding the protection of our environment and all requests related to the environment to which we have agreed. We are committed to the prevention of all forms of pollution.

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	
HMC	High Value Thick Film

Size	Power
0402	0.063W
0603	0.1W
0805	0.125W
1206	0.25W
1210	0.33W
2010	0.75W
2512	1W

Tolerance		
Code	Tol	Value
F	1%	E24
J	5%	
K	10%	

Packaging			
Code	Description	Size	Quantity
T	7" Reel Paper Tape	0402	10,000
		0603, 0805 1206, 1210	5,000
	7" Reel Plastic Tape	2010 2512	4,000

Resistance Value
Four characters with the multiplier used as the decimal holder.
30 Mohm = 30M0 100 Mohm = 100M 1.2 Gohm = 1G20