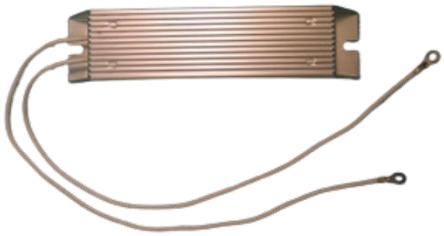
Features:

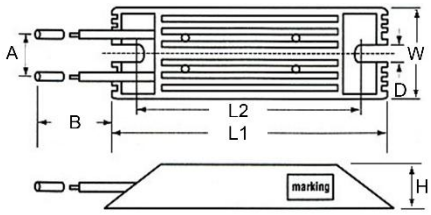
- Provides good stability for high power
- Available in non-inductive
- Resistant to moisture, solvent, and insulation
- Flame retardant material
- 100% RoHS compliant, REACH compliant, lead free, and halogen free



Electrical Specifications

Type / Code	Power Rating (W) @ 25ºC	Ohmic (Ω) Range and Tolerance 1%, 5%, 10%	
		Standard (MHL)	Non-inductive (NMHL)
MHL60 / NMHL60	60	0.1 - 10K	0.1 - 2.5K
MHL80 / NMHL80	80	0.1 - 10K	0.2 - 3K
MHL100 / NMHL100	100	0.1 - 10K	0.2 - 4K
MHL120 / NMHL120	120	0.15 - 15K	0.2 - 5K
MHL150 / NMHL150	150	0.15 - 15K	0.2 - 6K
MHL200 / NMHL200	200	0.3 - 15K	0.2 - 7K
MHL300 / NMHL300	300	0.5 - 30K	0.5 - 8K
MHL400 / NMHL400	400	0.5 - 30K	0.5 - 10K
MHL500 / NMHL500	500	0.5 - 30K	0.5 - 12K
MHL800 / NMHL800	800	1 - 50K	0.5 - 12K
MHL1000 / NMHL1000	1000	1 - 100K	1 - 15K

Mechanical Specifications



Type / Code	L1	L2	W	H	A	B	D	Unit
MHL60 / NMHL60	4.528 ± 0.079 115.00 ± 2.00	3.937 ± 0.079 100.00 ± 2.00	1.575 40.00	0.787 20.00	0.709 ± 0.394 18.00 ± 10.00	5.906 ± 0.394 150.00 ± 10.00	0.209 5.30	inches mm
MHL80 / NMHL80	5.512 ± 0.079 140.00 ± 2.00	4.921 ± 0.079 125.00 ± 2.00	1.575 40.00	0.787 20.00	0.709 ± 0.394 18.00 ± 10.00	5.906 ± 0.394 150.00 ± 10.00	0.209 5.30	inches mm
MHL100 / NMHL100	6.496 ± 0.079 165.00 ± 2.00	5.906 ± 0.079 150.00 ± 2.00	1.575 40.00	0.787 20.00	0.709 ± 0.394 18.00 ± 10.00	5.906 ± 0.394 150.00 ± 10.00	0.209 5.30	inches mm
MHL120 / NMHL120	7.480 ± 0.079 190.00 ± 2.00	6.890 ± 0.079 175.00 ± 2.00	1.575 40.00	0.787 20.00	0.709 ± 0.394 18.00 ± 10.00	5.906 ± 0.394 150.00 ± 10.00	0.209 5.30	inches mm

Mechanical Specifications (cont.)								
Type / Code	L1	L2	W	H	A	B	D	Unit
MHL150 / NMHL150	8.465 ± 0.079 215.00 ± 2.00	7.874 ± 0.079 200.00 ± 2.00	1.575 40.00	0.787 20.00	0.709 ± 0.394 18.00 ± 10.00	5.906 ± 0.394 150.00 ± 10.00	0.209 5.30	inches mm
MHL200 / NMHL200	6.496 ± 0.079 165.00 ± 2.00	5.906 ± 0.079 150.00 ± 2.00	2.362 60.00	1.181 30.00	0.709 ± 0.394 18.00 ± 10.00	5.906 ± 0.394 150.00 ± 10.00	0.209 5.30	inches mm
MHL300 / NMHL300	8.465 ± 0.079 215.00 ± 2.00	7.874 ± 0.079 200.00 ± 2.00	2.362 60.00	1.181 30.00	0.709 ± 0.394 18.00 ± 10.00	5.906 ± 0.394 150.00 ± 10.00	0.209 5.30	inches mm
MHL400 / NMHL400	10.433 ± 0.079 265.00 ± 2.00	9.843 ± 0.079 250.00 ± 2.00	2.362 60.00	1.181 30.00	0.709 ± 0.394 18.00 ± 10.00	5.906 ± 0.394 150.00 ± 10.00	0.209 5.30	inches mm
MHL500 / NMHL500	13.189 ± 0.079 335.00 ± 2.00	12.598 ± 0.079 320.00 ± 2.00	2.362 60.00	1.181 30.00	0.709 ± 0.394 18.00 ± 10.00	5.906 ± 0.394 150.00 ± 10.00	0.209 5.30	inches mm
MHL800 / NMHL800	15.748 ± 0.079 400.00 ± 2.00	15.157 ± 0.079 385.00 ± 2.00	2.362 60.00	1.181 30.00	0.709 ± 0.394 18.00 ± 10.00	5.906 ± 0.394 150.00 ± 10.00	0.209 5.30	inches mm
MHL1000 / NMHL1000	15.748 ± 0.079 400.00 ± 2.00	15.157 ± 0.079 385.00 ± 2.00	3.937 100.00	1.969 50.00	0.709 ± 0.394 18.00 ± 10.00	5.906 ± 0.394 150.00 ± 10.00	0.209 5.30	inches mm

Short Time Overload Rating									
Load Time (s)	5	10	30	60	180	300	600	900	1800
Max. Amps Rated Load (%)	400	350	250	200	140	120	110	105	100

Note: Max. change in resistance ≤ ±5%

NEMA Standard ON-OFF Cycles (8 hours)							
Time Cycles	Seconds ON	5	10	15	15	15	15
	Seconds OFF	75	70	75	45	30	15
Max Amps Rated Load (%)		290	215	185	160	150	125

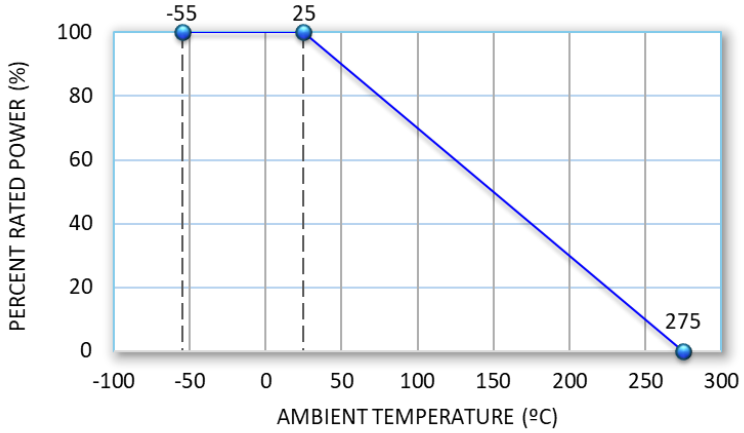
Note: Max. change in resistance ≤ ±5%

Lead Wire Conductor Cross-section: Withstand Voltage			
Withstand Voltage (V)	1.25 mm^2	2 mm^2	3.5 mm^2
2500	X	-	-
3000	X	X	X
3500	-	X	X

Performance Characteristics		
Test	Test Conditions	Specifications
Short Time Overload	5 X power rating for 5 seconds	ΔR(2% + 0.05Ω) max.
Moisture Resistance	Temperature: 40°C; Humidity: 95% Voltage: DC 100 V for 500 hours	ΔR(3% + 0.05Ω) max.
Load Life	Rated load for 1.5 hour ON; 0.5 hour OFF 1000 hours total	ΔR(5% + 0.05Ω) max.
Load Life in Moisture	Temperature: 40°C; Humidity: 95% 1/10 X rated wattage 1.5 hour ON; 0.5 hour OFF; 1000 hours total	ΔR(3% + 0.05Ω) max.
Vibration	10 c/s - 50 c/s - 10 c/s (1 minute) 2 hours each of paralleled and right angle	ΔR(1% + 0.05Ω) max.
Heat Resistance	275ºC - 2 hours	ΔR(5% + 0.05Ω) max.
Insulation Resistance	100MΩ min.	
Temperature Coefficient	260 ppm/ºC max.	

Operating temperature range is -55 to 275°C

Power Derating Curve:



Soldering Information

Soldering iron recommended temperatures: 330 to 350°C with minimum duration.
Maximum number of reflow cycles: 3.

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 3). 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 as amended by Directive (EU) 2015/863/EU as regards the list of restricted substances.

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)
MHL	Metal Clad Wirewound	Special	YES	100% Matte Sn	Always	Always

"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

M	H	L	1	0	0	J	B	2	0	0	R

Product Series	
Code	Description
MHL	Metal Clad WW
NMHL	Non-Inductive

Power Rating	
Size	W
60	60
80	80
100	100
120	120
150	150
200	200
300	300
400	400
500	500
800	800
1000	1000

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

Packaging			
Code	Description	Size	Quantity
B	Bulk	60 and 80	200
		All Other Sizes	100

Resistance Value
Four characters with the multiplier used as the decimal holder.
0.1 ohm = R100 100 ohm = 100R 10 Kohm = 10K0