

Features:

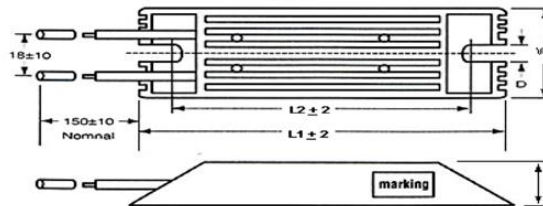
- Provides good stability for high power
- Available in non-inductive
- Resistant to moisture, solvent and insulation
- Flame retardant material
- RoHS compliant, lead free and halogen free



Electrical Specifications

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

Mechanical Specifications



Type / Code	L1	L2	W	H	D	Unit
MHL60 / NMHL60	4.528	3.937	1.575	0.787	0.209	inches
	115.00	100.00	40.00	20.00	5.30	mm
MHL80 / NMHL80	5.512	4.921	1.575	0.787	0.209	inches
	140.00	125.00	40.00	20.00	5.30	mm
MHL100 / NMHL100	6.496	5.906	1.575	0.787	0.209	inches
	165.00	150.00	40.00	20.00	5.30	mm
MHL120 / NMHL120	7.480	6.890	1.575	0.787	0.209	inches
	190.00	175.00	40.00	20.00	5.30	mm
MHL150 / NMHL150	8.465	7.874	1.575	0.787	0.209	inches
	215.00	200.00	40.00	20.00	5.30	mm
MHL200 / NMHL200	6.496	5.906	2.362	1.181	0.209	inches
	165.00	150.00	60.00	30.00	5.30	mm
MHL300 / NMHL300	8.465	7.874	2.362	1.181	0.209	inches
	215.00	200.00	60.00	30.00	5.30	mm
MHL400 / NMHL400	10.433	9.843	2.362	1.181	0.209	inches
	265.00	250.00	60.00	30.00	5.30	mm
MHL500 / NMHL500	13.189	12.598	2.362	1.181	0.209	inches
	335.00	320.00	60.00	30.00	5.30	mm
MHL800 / NMHL800	15.748	15.157	2.362	1.181	0.209	inches
	400.00	385.00	60.00	30.00	5.30	mm
MHL1000 / NMHL1000	15.748	15.157	3.937	1.969	0.209	inches
	400.00	385.00	100.00	50.00	5.30	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 $\leq \pm 5\%$

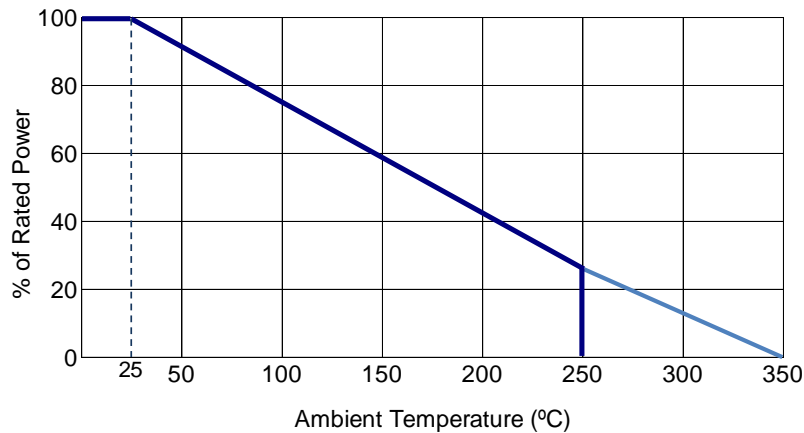
NEMA Standard ON-OFF Cycles (8 hours)							
Time Cycles	Seconds ON	5	10	15	15	15	15
	Seconds OFF	75	70	75	45	30	15
Max Amps Rated Load (%)		290	215	185	160	150	125

Note: Max. change in resistance $\leq \pm 5\%$

Lead Wire Conductor Cross-Section: Withstand Voltage			
Withstand Voltage	1.25 mm ²	2 mm ²	3.5 mm ²
2500 V	X	-	-
3000 V	X	X	X
3500 V	-	X	X

Performance Characteristics		
Test	Test Conditions	Specifications
Short Time Overload	5 X power rating for 5 seconds	$\Delta R(2\% + 0.05\Omega)$ max.
Moisture Resistance	Temperature: 40 °C; Humidity: 95% Voltage: DC 100 V for 500 hours	$\Delta R(3\% + 0.05\Omega)$ max.
Load Life	Rated load for 1.5 hour ON; 0.5 hour OFF 1000 hours total	$\Delta R(5\% + 0.05\Omega)$ 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	$\Delta R(3\% + 0.05\Omega)$ max.
Vibration	10 c/s - 50 c/s - 10 c/s (1 minute) 2 hours each of paralleled and right angle	$\Delta R(1\% + 0.05\Omega)$ max.
Heat Resistance	275 °C - 2 hours	$\Delta R(5\% + 0.05\Omega)$ max.
Insulation Resistance		100 M Ω min.
Temperature Coefficient		260 ppm / °C max.
Operating Temperature Range		-55 °C to 250 °C

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 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 Resistor	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

1 2 3 4 5 6 7 8 9 10 11 12

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

Product Series		Size		Power Rating		Tolerance		Packaging				Resistance Value
Code	Description	Code	Watts	Code	Tol	Code	Description	Size	Quantity		Four characters with the multiplier used as the decimal holder. 0.1 ohm = R100 100 ohm = 100R 10 Kohm = 10K0	
MHL	Metal Clad WW	60	60	F	1%	B	Bulk	60 and 80	200			
NMHL	Non-Inductive	80	80	J	5%			All Other Sizes	100			
		100	100	K	10%							
		120	120									
		150	150									
		200	200									
		300	300									
		400	400									
		500	500									
		800	800									
		1000	1000									