Resistive Product Solutions

Features: • Provides good stability for high power

- Available in non-inductive
- Resistant to moisture, solvent and insulation
- Flame retardant material



Electrical Specifications					
Type / Code	Power Rating (Watts) @ 25℃	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	1,000	1 - 100K	1 - 15K		

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
Time Cycles	Seconds OFF	75	70	75	45	30	15
Max Amps Ra	ated Load (%)	290	215	185	160	150	125

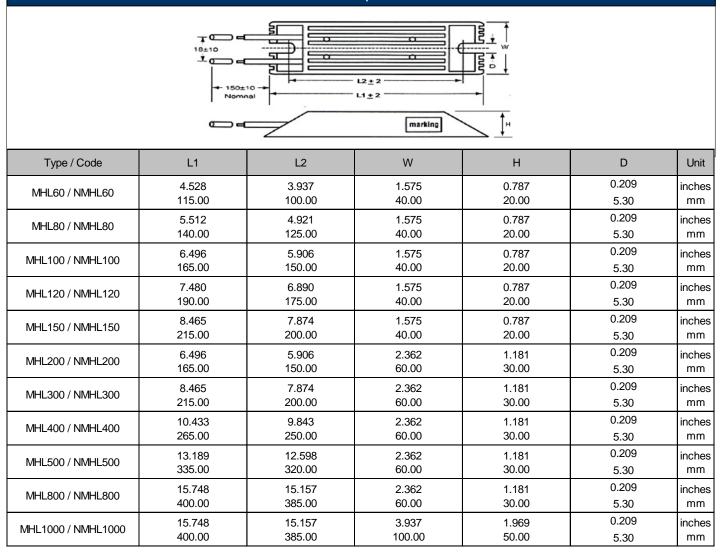
Note: Max. change in resistance  $\leq \pm 5\%$ 

Lead Wire Conductor Cross-Section: Withstand Voltage						
Withstand Voltage 1.25mm2 2mm2 3.5mm2						
2500 V	Х	-	-			
3000 V	Х	Х	Х			
3500 V	-	Х	Х			

Stackpole Electronics, Inc.

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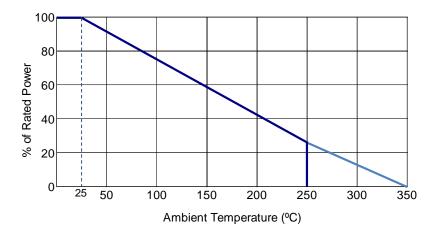
### **Mechanical Specifications**



Performance Characteristics					
Test	Test Conditions	Specifications			
Short Time Overload	5X power rating for 5 sec.	ΔR(2% + 0.05Ω) Max			
Moisture Resistance	Temperature: 40C; Humidity: 95% Voltage: DC 100V for 500 hr.	ΔR(3% + 0.05Ω) Max			
Load Life	Rated load for 1.5 hr ON; 0.5 hr OFF 1000 hr total	∆R(5% + 0.05Ω) Max			
Load Life in Moisture	Temperature: 40C; Humidity: 95% 1/10 X rated wattage 1.5 hr ON; 0.5 hr OFF; 1000 hr total	∆R(3% + 0.05Ω) Max			
Vibration	10c/s - 50c/s - 10c/s (1min) 2hr each of paralleled and right angle	∆R(1% + 0.05Ω) Max			
Heat Resistance	275ºC - 2 hr	∆R(5% + 0.05Ω) Max			
Insulation Resistance	100 MΩ min.				
Temperature Coefficient	260 ppm / °C max				
Operating Temperature Range	-55°C to 250°C				

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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	Product Description		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.

