Features:

- Aluminum housing for maximum heat dissipation
- Complete welded construction
- 10-50W tinned copper terminals
- 100–250W threaded terminals
- Centerless ground steatite or alumina cores
- Molded epoxy body for heat transfer
- Non-inductive winding available (NKAL)
- Suitable for electrical component grade wash process and can be conformally coated or potted
- RoHS compliant, lead-free and halogen-free

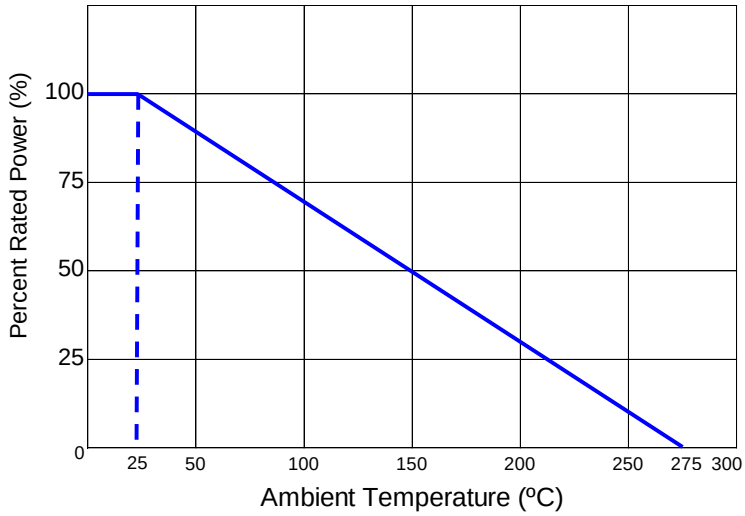
Electrical Specifications

Type / Code	MIL-R-26 Ref.	Power Rating (Watts @ 25ºC)		Dielectric Withstanding Voltage	TCR (ppm/ºC)	Ohmic Range (Ω) and Tolerance		
		Commercial	MIL			0.1%	0.5%	1%, 3%, 5%
KAL10	RE-65	12.5W	10W	1,000 VAC	<0.1Ω = ±100ppm 0.1Ω - 9.9Ω = ±50ppm 10Ω - 49Ω = ±30ppm >50Ω = ±20ppm	1 - 1K	1 - 1K	0.05 - 30K
KAL25	RE-70	25W	20W	3,000 VAC				0.05 - 51.1K
KAL50	RE-75	50W	30W					0.05 - 150K
KAL100	RE-77	100W	75W	2,500 VAC		-	1 - 500	0.1 - 3K
KAL250	RE-80	250W	120W				-	0.1 - 3K
NKAL10	-	12.5W	-	1,000 VAC	<0.1Ω = ±100ppm 0.1Ω - 9.9Ω = ±50ppm 10Ω - 49Ω = ±30ppm >50Ω = ±20ppm	1 - 499	1 - 499	0.05 - 15K
NKAL25		25W		3,000 VAC				0.05 - 24.9K
NKAL50		50W						0.05 - 75K
NKAL100		100W		2,500 VAC		-	1 - 249	0.1 - 1.5K
NKAL250		250W					-	0.1 - 1.5K

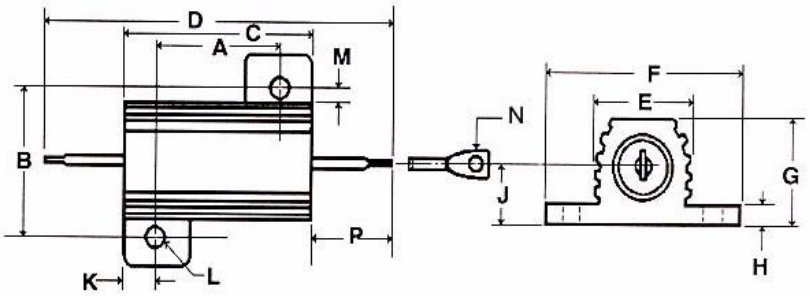
Performance Characteristics

Test	Test Condition	Result
Short time Overload	5x wattage rating - 5 seconds	ΔR ± (0.5% + 0.05Ω) MAX
Moisture resistance	Temp 40ºC moisture 95% CDC 100V for 500 hours	ΔR ± (0.5% + 0.05Ω) MAX
Load life	Load rating (chasis is mounted) 1.5 hours ON, 0.5 hours OFF. Repeated for 1000 hours	ΔR ± (1.5% + 0.05Ω) MAX

Power Derating Curve:

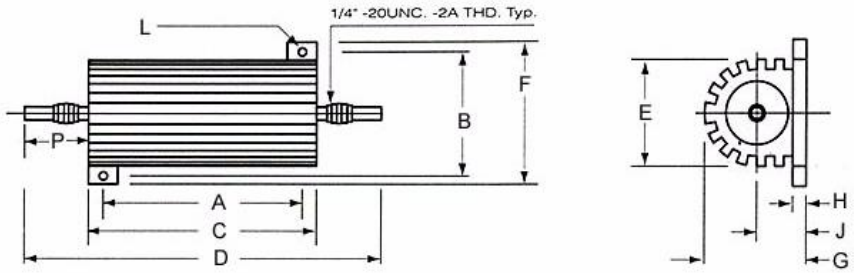


Mechanical Specifications – KAL/NKAL10, 25, 50



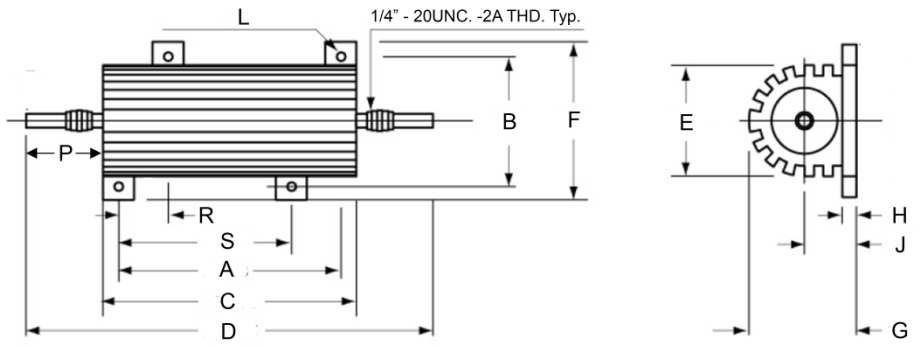
Type	A	B	C	D	E	F	G	Unit
KAL/NKAL10	0.562 ± 0.005 14.27 ± 0.13	0.625 ± 0.005 15.88 ± 0.13	0.750 ± 0.031 19.05 ± 0.79	1.375 ± 0.062 34.93 ± 1.57	0.420 ± 0.015 10.67 ± 0.38	0.800 ± 0.015 20.32 ± 0.38	0.390 ± 0.031 9.91 ± 0.79	inches mm
KAL/NKAL25	0.719 ± 0.005 18.26 ± 0.13	0.781 ± 0.005 19.84 ± 0.13	1.062 ± 0.031 26.97 ± 0.79	1.938 ± 0.062 49.23 ± 1.57	0.550 ± 0.015 13.97 ± 0.38	1.080 ± 0.015 27.43 ± 0.38	0.546 ± 0.031 13.87 ± 0.79	inches mm
KAL/NKAL50	1.563 ± 0.005 39.70 ± 0.13	0.844 ± 0.005 21.44 ± 0.13	1.968 ± 0.031 49.99 ± 0.79	2.781 ± 0.062 70.64 ± 1.57	0.630 ± 0.015 16.00 ± 0.38	1.140 ± 0.015 28.96 ± 0.38	0.610 ± 0.031 15.49 ± 0.79	inches mm
Type	H	J	K	L	M	N	P	Unit
KAL/NKAL10	0.075 ± 0.010 1.91 ± 0.25	0.190 ± 0.015 4.83 ± 0.38	0.093 ± 0.010 2.36 ± 0.25	0.093 ± 0.005 2.36 ± 0.13	0.102 ± 0.015 2.59 ± 0.38	0.086 ± 0.005 2.18 ± 0.13	0.312 ± 0.062 7.92 ± 1.57	inches mm
KAL/NKAL25	0.088 ± 0.010 2.24 ± 0.25	0.260 ± 0.015 6.60 ± 0.38	0.172 ± 0.010 4.37 ± 0.25	0.125 ± 0.005 3.18 ± 0.13	0.115 ± 0.015 2.92 ± 0.38	0.086 ± 0.005 2.18 ± 0.13	0.438 ± 0.062 11.13 ± 1.57	inches mm
KAL/NKAL50	0.088 ± 0.010 2.24 ± 0.25	0.300 ± 0.015 7.62 ± 0.38	0.196 ± 0.010 4.98 ± 0.25	0.125 ± 0.005 3.18 ± 0.13	0.107 ± 0.015 2.72 ± 0.38	0.086 ± 0.005 2.18 ± 0.13	0.410 ± 0.062 10.41 ± 1.57	inches mm

Mechanical Specifications – KAL/NKAL100



Type	A	B	C	D	E	F	Unit
KAL/NKAL100	2.717 ± 0.079 69.00 ± 2.00	2.362 ± 0.039 60.00 ± 1.00	3.504 ± 0.039 89.00 ± 1.00	5.315 ± 0.039 135.00 ± 1.00	1.811 ± 0.039 46.00 ± 1.00	2.756 ± 0.039 70.00 ± 1.00	inches mm
	G	H	J	L	P	Unit	
	1.752 ± 0.039 44.50 ± 1.00	0.187 ± 0.031 4.75 ± 0.79	0.748 ± 0.020 19.00 ± 0.50	0.197 ± 0.012 5.00 ± 0.30	0.906 ± 0.079 23.00 ± 2.00	inches mm	

Mechanical Specifications – KAL/NKAL250



Type	A	B	C	D	E	F	G	Unit
KAL/NKAL250	3.858 ± 0.079 98.00 ± 2.00	2.520 ± 0.039 64.00 ± 1.00	4.488 ± 0.039 114.00 ± 1.00	6.102 ± 0.039 155.00 ± 1.00	2.087 ± 0.039 53.00 ± 1.00	3.031 ± 0.039 77.00 ± 1.00	2.185 ± 0.039 55.50 ± 1.00	inches mm

H	J	L	P	R	S	Unit
0.250 ± 0.031 6.35 ± 0.79	0.984 ± 0.020 25.00 ± 0.50	0.197 ± 0.012 5.00 ± 0.30	0.827 ± 0.079 21.00 ± 2.00	0.866 22.00	3.071 78.00	inches mm

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)
KAL	Aluminum Housed Surface Mount Resistor General Purpose/Precision High Power Resistor	Special	YES	100% Matte Sn	Jan-06	06/01

"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
K	**A**	**L**	**1**	**0**	**F**	**B**	**1**	**0**	**K**	**0**

Product Series	
Code	Description
KAL	Standard
NKAL	Non-inductive

Power Rating	
Code	Power
10	10W
25	25W
50	50W
100	100W
250	250W

Tolerance	
Code	Tol
B	0.1%
D	0.5%
F	1%
H	3%
J	5%

Packaging			
Code	Description	Size	MOQ
B	Bulk	10	250
		25	250
		50	250
		100	60
		250	30

Resistance Value
Four characters with the multiplier used as the decimal holder. "L" used as multiplier of 10^{-3} for any value under 0.1 ohm.
0.05 ohm = 50L0 0.4 ohm = R400 1 ohm = 1R00 30 Kohm = 30K0