

Features:

- Aluminum housing for maximum heat dissipation
- Complete welded construction
- 10 – 50 W tinned copper terminals
- 100 – 250 W 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

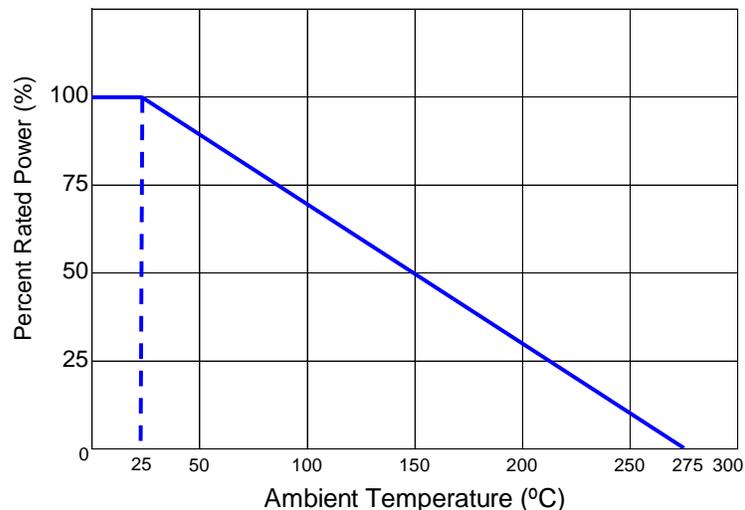


Electrical Specifications								
Type / Code	MIL-R-26 Ref.	Power Rating @ 25 °C (Watts)		Dielectric Withstanding Voltage (VAC)	TCR (ppm/°C)	Ohmic Range (Ω) and Tolerance		
		Commercial	MIL			0.1%	0.5%	1%, 3%, 5%
KAL10	RE-65	12.5	10	1000	< 0.1 Ω = ±100 ppm 0.1 Ω - 9.9 Ω = ±50 ppm 10 Ω - 49 Ω = ±30 ppm > 50 Ω = ±20 ppm	1 - 1 K	1 - 1 K	0.05 - 30 K
KAL25	RE-70	25	20	3000			0.05 - 51.1 K	
KAL50	RE-75	50	30				0.05 - 150 K	
KAL100	RE-77	100	75	2500		-	1 - 500	0.1 - 3 K
KAL250	RE-80	250	120				-	0.1 - 3 K
NKAL10	-	12.5	-	1000		1 - 499	1 - 499	0.05 - 15 K
NKAL25		25		3000				0.05 - 24.9 K
NKAL50		50						0.05 - 75 K
NKAL100		100		2500				0.1 - 1.5 K
NKAL250		250						0.1 - 1.5 K

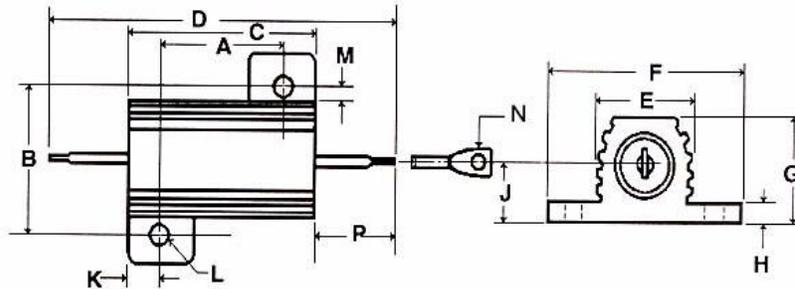
Performance Characteristics		
Test	Test Condition	Result
Short Time Overload	5 X wattage rating - 5 seconds	$\Delta R \pm (0.5\% + 0.05 \Omega) \text{ MAX}$
Moisture Resistance	Temp 40 °C moisture 95% CDC 100 V for 500 hours	$\Delta R \pm (0.5\% + 0.05 \Omega) \text{ MAX}$
Load Life	Load rating (chassis is mounted) 1.5 hours ON, 0.5 hours OFF. Repeated for 1000 hours	$\Delta R \pm (1.5\% + 0.05 \Omega) \text{ MAX}$

Operating Temperature: -55 °C to +275 °C

Power Derating Curve:

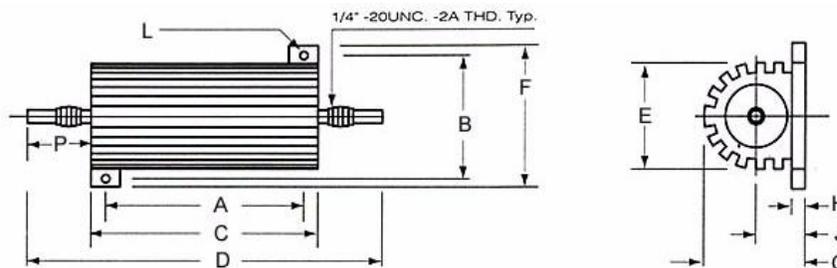


Mechanical Specifications – KAL/NKAL10, 25, 50



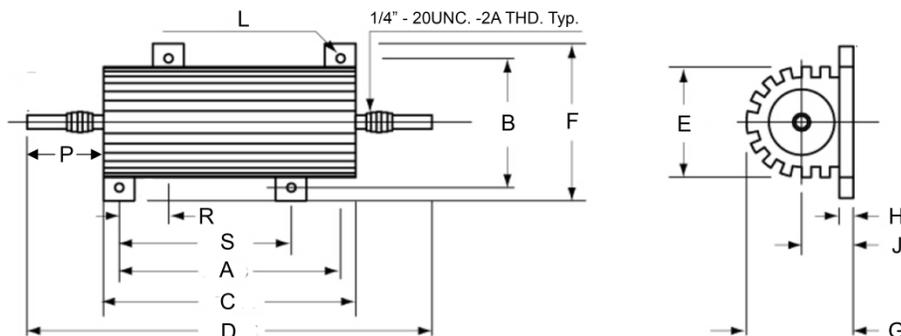
Type	A	B	C	D	E	F	G	Unit
KAL/NKAL10	0.562 ± 0.005	0.625 ± 0.005	0.750 ± 0.031	1.375 ± 0.062	0.420 ± 0.015	0.800 ± 0.015	0.390 ± 0.031	inches
	14.27 ± 0.13	15.88 ± 0.13	19.05 ± 0.79	34.93 ± 1.57	10.67 ± 0.38	20.32 ± 0.38	9.91 ± 0.79	mm
KAL/NKAL25	0.719 ± 0.005	0.781 ± 0.005	1.062 ± 0.031	1.938 ± 0.062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

Mechanical Specifications – KAL/NKAL100



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

Mechanical Specifications – KAL/NKAL250



Type	A	B	C	D	E	F	G	Unit
KAL/NKAL250	3.858 ± 0.079	2.520 ± 0.039	4.488 ± 0.039	6.102 ± 0.039	2.087 ± 0.039	3.031 ± 0.039	2.185 ± 0.039	inches
	98.00 ± 2.00	64.00 ± 1.00	114.00 ± 1.00	155.00 ± 1.00	53.00 ± 1.00	77.00 ± 1.00	55.50 ± 1.00	mm
	H	J	L	P	R	S	Unit	
	0.250 ± 0.031	0.984 ± 0.020	0.197 ± 0.012	0.827 ± 0.079	0.866	3.071	inches	
	6.35 ± 0.79	25.00 ± 0.50	5.00 ± 0.30	21.00 ± 2.00	22.00	78.00	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		Power Rating		Tolerance		Packaging				Resistance Value
Code	Description	Code	Power	Code	Tol	Code	Description	Size	MOQ	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
KAL	Standard	10	10 W	B	0.1%	B	Bulk	10	250	
NKAL	Non-inductive	25	25 W	D	0.5%			25	250	
		50	50 W	F	1%			50	250	
		100	100 W	H	3%			100	60	
		250	250 W	J	5%			250	30	