

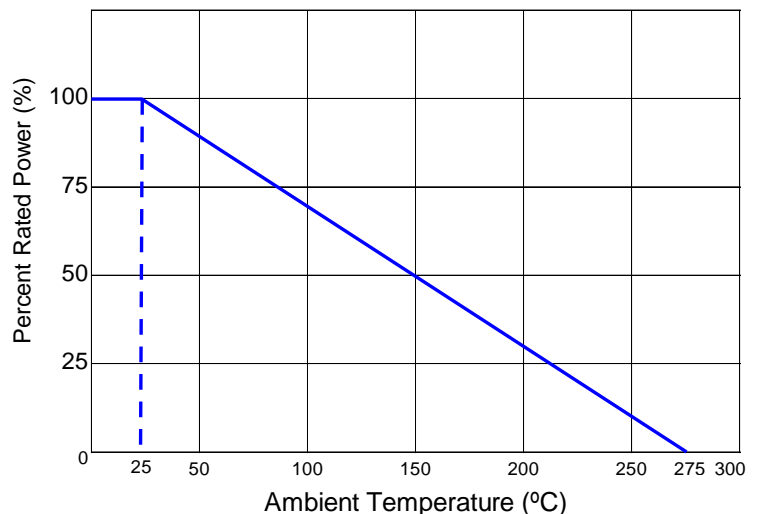
- Features:
- Aluminum housing for maximum heat dissipation
  - Complete welded construction
  - 10-50W tinned copper terminals
  - 100–250W threaded terminals
  - Centerless ground steatite or alumina cores
  - Molded epoxy body for heat transfer
  - Non-inductive winding available (NKAL)
  - RoHS compliant / lead-free

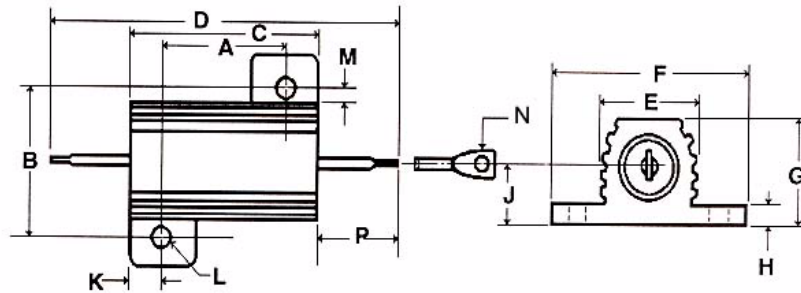


Electrical Specifications								
Type / Code	MIL-R-26 Ref.	Power Rating (Watts @ 25°C)		Dielectric Withstanding Voltage	TCR (ppm/°C)	Ohmic Range (Ω) and Tolerance		
		Commercial	MIL			0.1%	0.5%	1%, 3%, 5%
KAL10	RE-65	12.5W	10W	1,000 VAC	$<0.1\Omega = \pm 100\text{ppm}$ $0.1\Omega - 9.9\Omega = \pm 50\text{ppm}$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

Performance Characteristics		
Test	Test Conditions	Results
Short time Overload	5x wattage rating - 5 seconds	$\Delta R \pm (0.5\% + 0.05\Omega)$ MAX
Moisture resistance	Temp 40°C moisture 95% CDC 100V for 500 hours	$\Delta R \pm (0.5\% + 0.05\Omega)$ MAX
Load life	Load rating (chassis is mounted) 1.5 hours ON, 0.5 hours OFF. Repeated for 1000 hours	$\Delta R \pm (1.5\% + 0.05\Omega)$ MAX

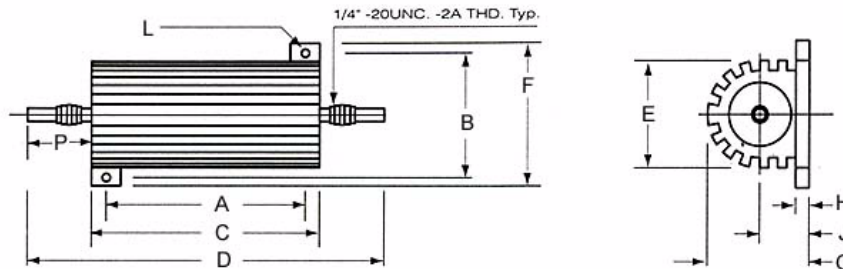
**Power Derating Curve:**





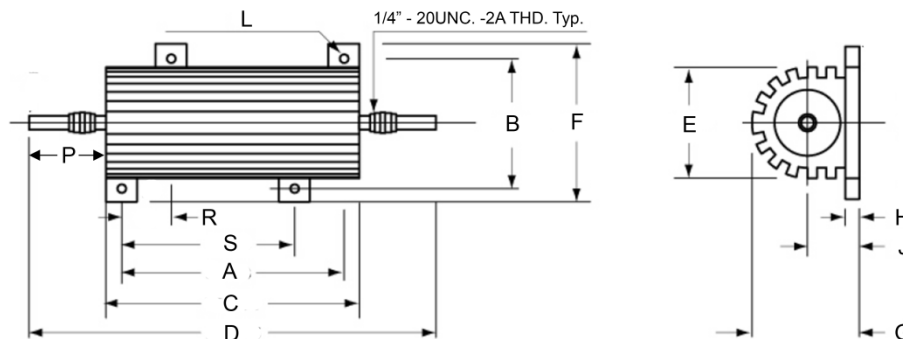
**Mechanical Specifications – KAL/NKAL10, 25, 50**

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	

**How to Order**

1	2	3	4	5	6	7	8	9	10	11
<b>K</b>	<b>A</b>	<b>L</b>	<b>1</b>	<b>0</b>	<b>F</b>	<b>B</b>	<b>1</b>	<b>0</b>	<b>K</b>	<b>0</b>

Product Series		Size	Power	Tolerance		Packaging				Resistance Value
KAL	Standard	10	10W	Code	Tol	Code	Description	Size	MOQ	Four characters with the multiplier used as the decimal holder. "L" used as multiplier of 10 <sup>-3</sup> for any value under 0.1 ohm. 0.05 ohm = 50L0 0.4 ohm = R400 1 ohm = 1R00 30 Kohm = 30K0
NKAL	Non-inductive	25	25W	B	0.1%	B	Bulk	10	250	
		50	50W	D	0.5%			25	250	
		100	100W	F	1%			50	250	
		250	250W	H	3%			100	60	
				J	5%			250	30	