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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# 89 Series

## Metal-Mite® Aluminum Housed Axial Terminal Wirewound, 1% Tolerance



The 89 Series is a high-performance axial type resistor. These molded-construction metal-housed resistors are available in higher power ratings than standard axial resistors and are better suited to withstanding vibration, shock and harsh environmental conditions.

The 89 Series Metal-Mite® resistors are aluminum housed to maintain high stability during operation and to permit secure mounting to chassis surfaces.

The metal housing also provides heat-sinking capabilities.

### FEATURES

- High Stability:  $\pm 0.5\% \Delta R$
- High power to size ratio
- Metal housing allows chassis mounting and provides heat sink capability

### SERIES SPECIFICATIONS

Series	Wattage	Ohms	Voltage
805	5	0.10-25K	210
810	10	0.10-50K	320
825	25	0.010-75K	520
850	50	0.005-100K	1170

Non-Inductive versions available. Insert "N" before tolerance code.  
Example: 850NF560

### CHARACTERISTICS

<b>Housing</b>	Metal, anodized aluminum
<b>Internal Coating</b>	Silicone
<b>Core</b>	Ceramic
<b>Terminals</b>	Solder-coated axial
<b>Derating</b>	Linearly from 100% @ +25°C to 0% @ +275°C.
<b>Tolerance</b>	$\pm 1\%$ and $\pm 5\%$ (other tolerances available).
<b>Power rating</b>	Rating is based on chassis mounting area and temperature stability. Proper heat sink as follows: 5W and 10W units, 4" x 6" x 2" x .040" Aluminum chassis; 25W units, 5" x 7" x 2" x .040" Aluminum chassis; 50W units, 12" x 12" x .059" Aluminum panel.
<b>Maximum ohmic values</b>	See chart.
<b>Overload</b>	5 times rated wattage for 5 seconds.
<b>Temperature coefficient</b>	Under 1 $\Omega$ : $\pm 90$ ppm/°C; 1 to 9.99 $\Omega$ : $\pm 50$ ppm/°C; 10 $\Omega$ and over: $\pm 20$ ppm/°C.
<b>Dielectric withstanding voltage</b>	5W and 10W rating, 1000 VAC; 25 and 50W ratings, 2250 VAC.

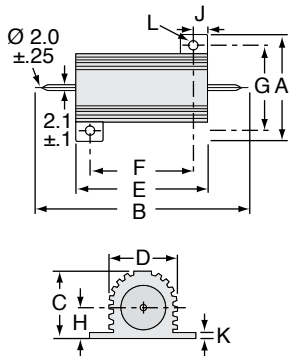
(continued)

# 89 Series

## Metal-Mite® Aluminum Housed Axial Terminal Wirewound, 1% Tolerance

### DIMENSIONS

(in./mm)



Dimensions have changed as of August 2015

	A max.	B max.	C max.	D max.	E max.	F ±.3mm	G ±.3mm	H max.	J max.	K max.	L ±.25mm
805	0.65" / 16.5	1.18" / 30.0	0.35" / 8.8	0.33" / 8.5	0.63" / 15.9	0.44" / 11.3	0.49" / 12.4	0.18" / 4.5	0.09" / 2.4	0.07" / 1.8	0.09" / 2.4
810	0.83" / 21.0	1.44" / 36.5	0.43" / 11.0	0.44" / 11.2	0.78" / 19.9	0.56" / 14.3	0.63" / 15.9	0.22" / 5.5	0.11" / 2.8	0.07" / 1.8	0.09" / 2.4
825	1.10" / 28.0	2.01" / 51.0	0.58" / 14.8	0.56" / 14.2	1.07" / 27.3	0.72" / 18.3	0.78" / 19.8	0.30" / 7.7	0.20" / 5.2	0.10" / 2.6	0.13" / 3.2
850	1.10" / 28.0	2.85" / 72.5	0.58" / 14.8	0.56" / 14.2	1.93" / 49.1	1.56" / 39.7	0.84" / 21.4	0.33" / 8.4	0.20" / 5.2	0.10" / 2.6	0.13" / 3.2

### ORDERING INFORMATION

Ohmic value	Wattage				Ohmic value	Wattage				Ohmic value	Wattage					
	Part No. Prefix	5	10	25		50	Part No. Prefix	5	10		25	50	Part No. Prefix	5	10	25
0.005	R005			✓	20	20R	✓	✓			1,500	1K5	✓	✖	✖	✓
0.010	R010			✓	25	25R	✓	✓			2,000	2K0	✓	✖	✖	
0.025	R025			✓	30	30R	✖	✖			2,500	2K5	✓	✓		
0.1	R10			✓	40	40R	✖	✓			3,000	3K0	✖	✓	✓	✖
0.3	R30			✓	50	50R	✓	✓			3,500	3K5	✖	✖		
0.5	R50			✓	75	75R	✓	✖			4,000	4K0	✓	✓		
0.7	R70			✓	100	100	✓	✓			4,500	4K5	✓	✖		
1.0	1R0	✓	✓	✓	150	150	✓	✓			5,000	5K0	✓	✓	✓	✓
1.5	1R5	✖	✓	✓	200	200	✖	✖			6,000	6K0	✖	✖		
2.0	2R0	✖	✓	✓	250	250	✓	✓			10,000	10K	✓	✖	✓	✓
3.0	3R0	✓	✓	✓	300	300	✓	✖			15,000	15K	✓	✓	✖	✖
4.0	4R0	✖	✓	✓	400	400	✖	✖			20,000	20K	✖	✖		
5.0	5R0	✓	✓	✓	500	500	✖	✖			25,000	25K	✓	✖	✖	✖
10.0	10R	✓	✓	✓	750	750	✖	✖			50,000	50K	✖	✖		
15.0	15R	✓	✓	✓	1,000	1K0	✖	✓			75,000	75K	✖	✖		
											100,000	100K	✖	✖		

Non-Inductive Winding  
Optional (blank = std. winding)    RoHS Compliant

<b>805NF5R0E</b>		
Series	Tolerance	Ohms
805 = 5 Watt	F = 1%	R005 = 0.005Ω
810 = 10 watt	J = 5%	R10 = 0.1Ω
825 = 25 watt		1R0 = 1.0Ω
850 = 50 watt		250 = 250Ω
		1K0 = 1,000Ω
		1K5 = 1,500Ω
		25K = 25,000Ω

✓ = Standard values  
✖ = Non-standard values subject to minimum handling charge per item

Shaded values involve very fine resistance wire and should not be used in critical applications without burn-in and/or thermal cycling.

As of September 2006, the 89 Series is no longer offered as Mil. Spec.