HS/HSN Series

Aluminum Housed Axial Lead Wirewound Resistors Industrial/Commercial Grade

The Ward Leonard brand, HS/HSN Series, complements Ohmite's Military grade 89 Series as a lower cost alternative. The HS/HSN Series offers the added feature of larger sizes (100 and 250 watts) not available in the 89 Series.

HS/HSN Series maintains the same construction, materials, and manufacturing techniques as the Mil-R-18546 approved 89 Series. As a made-to-order product, it is recommended for higher volume applications.

FEATURES

- Standard winding (Model HS)
- Non-inductive winding (Model HSN)
- Molded construction for total environmental protection
- Complete welded construction
- Mounts on chassis to utilize heat-sink effect
- High stability at conventional power ratings
- Flat marking surface for easy identification
- RoHS compliant product available Jan. 2006 Add "E" suffix to part number to specify.

SPECIFICATIONS

Material

Housing: Aluminum with hard anodic coating.

Internal Coating: Silicone.

Core: Ceramic.

Terminals: Solder-coated axial lead.

Derating: Linearly from 100% @ +25°C to 0% @ +275°C.

Electrical

Tolerance: ±1% and ±5% (other tolerances available).

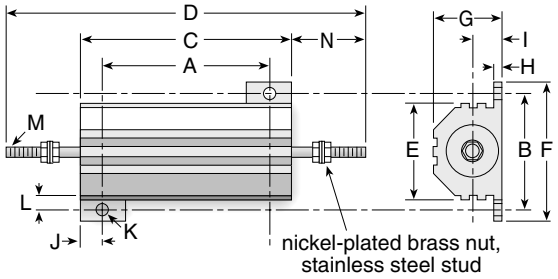
Power rating: Rating is based on chassis mounting area and temperature stability. Proper heat sink as follows: 25W units, 5" x 7" x 2" x 0.040" Aluminum chassis; 50W units, 12" x 12" x 0.059" Aluminum panel; 100 and 250W units, 12" x 12" x 0.125 Aluminum panel.

Maximum ohmic values: See chart.

Overload: 5 times rated wattage for 5 seconds.

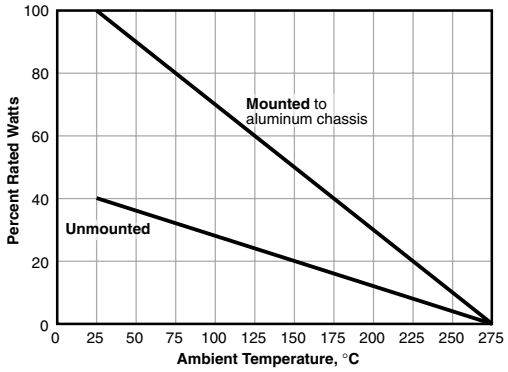
Temperature coefficient:
Under 1Ω: ±90 ppm/°C
1 to 9.99Ω: ±50 ppm/°C
10Ω and over: ±30 ppm/°C.

Dielectric withstanding voltage: 25W, 1000VAC; 50W, 2000VAC; 100W and 250W, 4500VAC.



Series	Power Rating (Watts)	Resistance Range (Ohms)	Max. Working Voltage
HS100	100	.05 - 29.4K	1900
HSN100	100	1.0 - 14.7K	1350
HS250	250	.10 - 35.7K	2300
HSN250	250	1.0 - 17.4K	1625

DERATING CURVE



DIMENSIONS

in. *(mm)*	HS100 / HSN100 100 watt	HS250 / HSN250 250 watt
Dim. A	2.75 ± .010 *(69.85 ± .254)*	3.875 ± .010 *(98.425 ± .254)*
Dim. B	2.25 ± .010 *(57.15 ± .254)*	2.5 ± .010 *(63.50 ± .254)*
Dim. C	3.50 ± .031 *(88.90 ± .787)*	4.5 ± .031 *(114.30 ± .787)*
Dim. D	5.478 ± .093 *(139.14 ± 2.36)*	7.0 ± .093 *(117.80 ± 2.36)*
Dim. E	1.812 ± .031 *(46.02 ± .787)*	2.125 ± .031 *(53.98 ± .787)*
Dim. F	2.812 ± .031 *(71.42 ± .787)*	3.0 ± .031 *(76.20 ± .787)*
Dim. G	1.75 ± .031 *(44.45 ± .787)*	2.188 ± .031 *(55.58 ± .787)*
Dim. H	1.88 ± .031 *(4.78 ± .787)*	0.250 ± .031 *(6.35 ± .787)*
Dim. I	0.770 ± .015 *(19.56 ± .381)*	0.955 ± .015 *(24.26 ± .381)*
Dim. J	0.375 ± .031 *(9.52 ± .787)*	0.312 ± .031 *(7.92 ± .787)*
Dim. K	0.188 ± .010 *(4.78 ± .254)*	0.188 ± .010 *(4.78 ± .254)*
Dim. L	0.219 ± .031 *(5.56 ± .787)*	0.25 ± .031 *(6.35 ± .787)*
Dim. M	12 - 24 UNC - 2A THD	1/4 - 20 UNC - 2A THD
Dim. N	0.989 ± .031 *(25.12 ± .787)*	1.25 ± .031 *(31.75 ± .787)*