



Manufactured in line with the requirements of MIL 18546 and IEC 115, designed for direct heatsink mounting with thermal compound to achieve maximum performance.

- High Power to volume
- Wound to maximise High Pulse Capability
- Values from R005 to 100K
- Custom designs welcome
- RoHS Compliant



Characteristics

Tolerance (Code): Standard $\pm 5\%$ (J) and $\pm 10\%$ (K). Also available $\pm 1\%$ (F), $\pm 2\%$ (G) and $\pm 3\%$ (H)

Typically \geq R05 \pm 5% \leq R047 \pm 10% Tolerance for low Ω values:

Temperature coefficients: Typical values < 1K 100ppm Std. > 1K 25ppm Std. For lower TCR's please contact Arcol

Insulation resistance (Dry): 10,000 $M\Omega$ minimum

Power dissipation: At high ambient temperature dissipation derates linearly to zero at 200°C

Ohmic values: From R005 to 100K depending on wattage size

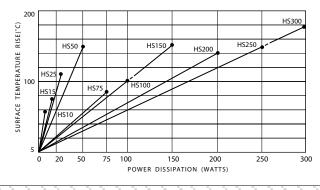
Low inductive (NHS): Specify by adding N before HS Series code, e.g. NHS50

NHS ohmic value: Divide standard HS maximum value by 4

NHS working volts: Divide standard HS maximum working voltage by 1.414

Temp. Rise & Power Dissipation

Surface temperature of resistor related to power dissipation. The resistor is standard heatsink mounted using a proprietary heatsink compound.



Heat Dissipation

Heat dissipation: Whilst the use of proprietary heat sinks with lower thermal resistances is acceptable, uprating is not recommended. For maximum heat transfer it is recommended. that a heat sink compound be applied between the resistor base and heat sink chassis mounting surface. It is essential that the maximum hot spot temperature of 200°C is not exceeded, therefore, the resistor must be mounted on a heat sink of correct thermal resistance for the power being dissipated.

Ordering Procedure

Standard Resistor. To specify standard: Series, Watts, Ohmic Value, Tolerance Code, e.g.: HS25 2R2 J

Non Inductive Resistor. To specify add N, e.g.: NHS100 10R J

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The information contained herein does not form part of a contract and is subject to change without notice. Arcol operate a policy of continual product development, therefore, specifications may change.

 $It is the {\it responsibility} of the {\it customertoensure} that the {\it component}$ selected from our range is suitable for the intended application. If in doubt please ask Arcol.

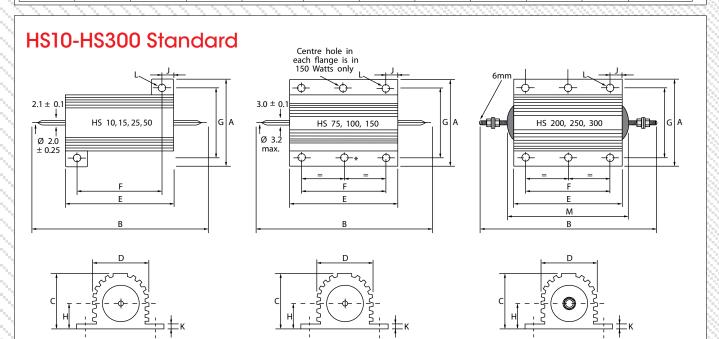
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Electrical Specifications

| | | | , | | | | | | | | | | | |
|-------|-------------------------|-------------------------------------|---------------------------------------|--------------------------|--------------------------------|-----------------------------|-----------------------------|-------------------------|--|-------------------|-----------------|--|--|--|
| | Style MIL-R 18546 | Power rating on std. heatsink @25°C | Watts with no heatsink @25°C | Resis- tance range | Limiting element voltage | Voltage proof AC Peak | Voltage proof AC rms. | Approx weight gms | Typical surface rise HS mounted | Standard heatsink | | | | |
| Size | | | | | | | | | | cm² | Thickness mm | | | |
| HS10 | RE 60 | 10 | 5 | R005-10K | 160 | 1400 | 1000 | 4 | 5.8 | 415 | 1 | | | |
| HS15 | RE 65 | 15 | 7 | R005-10K | 265 | 1400 | 1000 | 7 | 5.1 | 415 | 1 | | | |
| HS25 | RE 70 | 25 | 9 | R005-36K | 550 | 3500 | 2500 | 14 | 4.2 | 535 | 1 | | | |
| HS50 | RE 75 | 50 | 14 | R01-86K | 1250 | 3500 | 2500 | 32 | 3.0 | 535 | 1 | | | |
| HS75 | | 75 | 24 | R01-50K | 1400 | 6363 | 4500 | 85 | 1.1 | 995 | 3 | | | |
| HS100 | | 100 | 30 | R01-70K | 1900 | 6363 | 4500 | 115 | 1.0 | 995 | 3 | | | |
| HS150 | | 150 | 45 | R01-100K | 2500 | 6363 | 4500 | 175 | 1.0 | 995 | 3 | | | |
| HS200 | | 200 | 50 | R01-50K | 1900 | 7070 | 5000 | 475 | 0.7 | 3750 | 3 | | | |
| HS250 | | 250 | 55 | R01-50K | 2200 | 7070 | 5000 | 600 | 0.6 | 4765 | 3 | | | |
| HS300 | | 300 | 60 | R01-68K | 2500 | 7070 | 5000 | 700 | 0.6 | 5780 | 3 | | | |



Dimensions (mm)

| Size | A Max | В Мах | C Max | D Max | E Max | F±0.3 | G±0.3 | Н Мах | J Max | K Max | L ±0.25* | M Max |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|-------|
| HS10 | 16.5 | 30.0 | 8.8 | 8.5 | 15.9 | 11.3 | 12.4 | 4.5 | 2.4 | 1.8 | 2.4 | |
| HS15 | 21.0 | 36.5 | 11.0 | 11.2 | 19.9 | 14.3 | 15.9 | 5.5 | 2.8 | 1.8 | 2.4 | |
| HS25 | 28.0 | 51.0 | 14.6 | 14.0 | 27.3 | 18.3 | 19.8 | 7.3 | 4.7 | 2.6 | 3.2 | |
| HS50 | 29.7 | 72.5 | 14.8 | 14.2 | 49.1 | 39.7 | 21.4 | 8.5 | 5.2 | 2.6 | 3.2 | |
| HS75 | 47.5 | 72.0 | 24.1 | 27.3 | 48.7 | 29.0 | 37.0 | 11.8 | 10.4 | 3.7 | 4.4 | |
| HS100 | 47.5 | 88.0 | 24.1 | 27.3 | 65.2 | 35.0 | 37.0 | 11.8 | 15.4 | 3.7 | 4.4 | |
| HS150 | 47.5 | 121.0 | 24.1 | 27.3 | 97.7 | 58.0 | 37.0 | 11.8 | 20.4 | 3.7 | 4.4 | |
| HS200 | 72.5 | 145.7 | 41.8 | 45.5 | 89.7 | 70.0 | 57.2 | 20.5 | 10.4 | 5.5 | 5.1 | 103.4 |
| HS250 | 72.5 | 167.0 | 41.8 | 45.5 | 109.7 | 89.0 | 57.2 | 20.5 | 10.4 | 5.5 | 5.1 | 122.4 |
| HS300 | 72.5 | 184.4 | 41.8 | 45.5 | 127.7 | 104.0 | 59.0 | 20.5 | 12.4 | 5.5 | 6.6 | 141.4 |
| * HS200-HS300 Watts is + 0.45 | | | | | | | | | | | | |

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