

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)
Tolerance for low $\Omega$ values:	Typically $\geq R05 \pm 5\% \leq R047 \pm 10\%$
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 responsibility of the customer to ensure that the component selected from our range is suitable for the intended application. If in doubt please ask ARCOL.

## Electrical Specifications

Size	Style MIL-R 18546	Power rating on std. heatsink @25°C	Watts with no heatsink @25°C	Resistance range	Limiting element voltage	Voltage proof AC Peak	Voltage proof AC rms.	Approx weight gms	Typical surface rise HS mounted	Standard heatsink	
										cm <sup>2</sup>	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

## HS10-HS300 Standard Resistor



## Dimensions (mm)

Size	A Max	B Max	C Max	D Max	E Max	F±0.3	G±0.3	H Max	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	14.8	14.2	27.3	18.3	19.8	7.7	5.2	2.6	3.2	
HS50	28.0	72.5	14.8	14.2	49.1	39.7	21.4	8.4	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

# Mouser Electronics

Authorized Distributor

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## Ohmite:

[HS250 50R 1%](#) [HS200 4R4 5%](#) [HS100 0R5 5%](#) [HS100 0R1 5%](#) [HS250 560R 1%](#) [HS50 5R0 1%](#) [HS10 5R0 1%](#)  
[HS50 150R 1%](#) [HS25 68R 1%](#) [HS10 150R 1%](#) [HS25 15R 1%](#) [HS25 1K0 1%](#) [HS10 2R7 1%](#) [HS50 2R7 1%](#) [HS50](#)  
[47R 1%](#) [HS250 2K7 1%](#) [HS50 40R 1%](#) [HS50 2K2 1%](#) [HS25 8R0 1%](#) [HS15 8R0 1%](#) [HS10 2K2 1%](#) [HS15 3K3 1%](#)  
[HS10 3K3 1%](#) [HS200 2R7 1%](#) [HS250 2R7 1%](#) [HS100 2R7 1%](#) [HS50 250R 1%](#) [HS10 250R 1%](#) [HS50 51R1 1%](#)  
[HS50 3K3 1%](#) [HS25 3K3 1%](#) [HS300 2R7 1%](#) [HS50 51R5 1%](#) [HS50 25K 1%](#) [HS50 56R 1%](#) [HS200 3K3 1%](#) [HS10](#)  
[560R 1%](#) [HS50 560R 1%](#) [HS100 0R47 5%](#) [HS300 1K5 1%](#) [HS25 10K 1%](#) [HS15 10K 1%](#) [HS250 40R 1%](#) [HS300](#)  
[680R 1%](#) [HS300 7R5 1%](#) [HS200 7R5 1%](#) [HS250 680R 1%](#) [HS100 0R22 5%](#) [HS100 0R33 5%](#) [HS100 0R56 5%](#)  
[HS100 680R 1%](#) [HS100 0R51 5%](#) [HS250 75R 1%](#) [HS250 7R5 1%](#) [HS100 0R15 5%](#) [HS100 1K5 1%](#) [HS100 0R82](#)  
[5%](#) [HS100 0R68 5%](#) [HS200 680R 1%](#) [HS100 0R27 5%](#) [HS100 7R5 1%](#) [HS50 50K 1%](#) [HS200 220R 1%](#) [NHS100](#)  
[10R 1%](#) [HS100 300R 1%](#) [HS15 40R 1%](#) [HS250 220R 1%](#) [NHS300 10R 5%](#) [HS300 220R 1%](#) [NHS300 11R 5%](#)  
[NHS100 15R 1%](#) [HS75 10R 5%](#) [HS100 220R 1%](#) [HS15 56R 1%](#) [HS10 1R0 1%](#) [HS50 1R0 1%](#) [HS10 1R5 1%](#)  
[HS50 1R5 1%](#) [HS15 50R 1%](#) [HS100 8R0 1%](#) [HS250 8R0 1%](#) [HS200 8R0 1%](#) [HS300 8R0 1%](#) [HS10 500R 1%](#)  
[HS200 0R33 1%](#) [HS50 500R 1%](#) [HS75 680R F](#) [HS75 5R0 F](#) [HS75 68R F](#) [HS75 2R0 F](#) [HS75 2R2 F](#) [HS75 2R7 F](#)  
[HS75 0R1 J](#) [HS75 27R F](#) [HS75 25R F](#) [HS75 22R F](#) [HS75 220R F](#) [HS75 20R F](#) [HS150 8R0 F](#) [HS150 22R F](#)