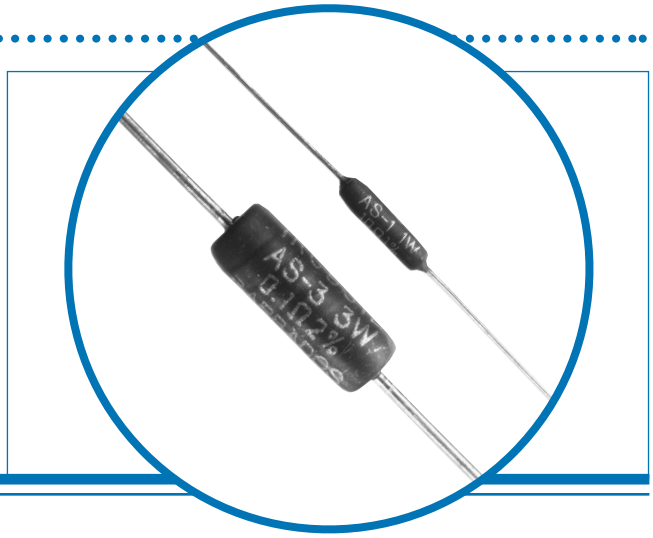
Semi-Precision Power Wirewound Resistor

TT electronics
Welwyn Components

AS Series

- **0.25 to 10 watts**
- **Tolerance down to ±0.5%**
- **0.1 ohm to 175K ohms**
- **Resistance wire TCR ±20 ppm/°C**



Electrical Data

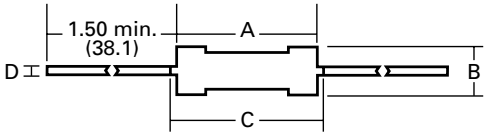
Type	Equivalent MIL-R-26 Style	Power Rating (watts) 125°C	25°C	Commercial Range (ohms) Min.	Max.	Non-Inductive Range (ohms) Min.	Max.	Available Resistance (ohms) 0.5%, 1%	3%, 5%
AS-1/4	RW81	0.5	1	0.1	1.0K	*	*	1-1K	0.1-1K
AS-1/2		0.5	1	0.1	6.0K	*	*	1-6K	0.1-6K
AS-1	RW70U	1	2	0.1	7.5K	0.1	3.8K	1-7.5K	0.1-7.5K
AS-1C		1	2	.05	2K	*	*	1-2K	.05-2K
AS-2	RW-69V/ RW79U	2	3	0.1	20K	0.5	10K	1-20K	0.1-20K
AS-2B		3	4	0.1	24K	0.5	12K	1-24K	0.1-24K
AS-2C		2	3	0.1	18K	0.2	7.5K	1-18K	0.1-18K
AS-3		3	5	0.1	30K	0.5	15K	1-30K	0.1-30K
AS-5	RW74U/ RW67U	5	7	0.1	60K	0.8	30K	1-60K	0.1-60K
AS-7		7	9	0.1	90K	1.0	45K	1-90K	0.1-90K
AS-10	RW68V/ RW78U	10	14	0.1	175K	3.0	50K	1-175K	0.1-175K

Inductance of AS-1/2 is less than 1µH at 1MHz.
To order non-inductive types, add the prefix 'N'. Example: NAS-1, NAS-2C, etc.

* Typical inductance of AS-1C <5ohms is <1µH.
Lower values available upon request.

Physical Data

Dimensions (mm) Type	A ±0.81	B (max)	C (max)	D (Lead Diameter)
AS-1/4	6.4	2.4	7.9	0.5
AS-1/2	7.9	2.4	9.5	0.5
AS-1	9.3	3.2	10.9	0.5 0.64
AS-1C	6.5	2.9	7.7	0.64 0.8
AS-2	12.2	6.3	15.2	0.8
AS-2B	13.7	5.6	16.6	0.8
AS-2C	11.0	4.0	15.1	0.8
AS-3	17.5	7.2	20.6	1.0
AS-5	22.2	8.8	24.9	1.0
AS-7	31.8	8.8	35.0	1.0
AS-10	46.0	9.8	49.2	1.0



Please note lead length dimension change on the following two items only:
AS-2B 33.0mm (min)
AS-2C 33.0mm (min)

Note:
- Coating and marking is resistant to normal freon degreasing.
  Consult factory for special requirements.
- AS marking available in Alpha Numeric or Colourbanding - identification available.

* Leads are solder plated. AS-1C leads are copper. All others are 40% conductivity copper sheathed steel.

General Note
Welwyn Components reserves the right to make changes in product specification without notice or liability.
All information is subject to Welwyn's own data and is considered accurate at time of going to print.

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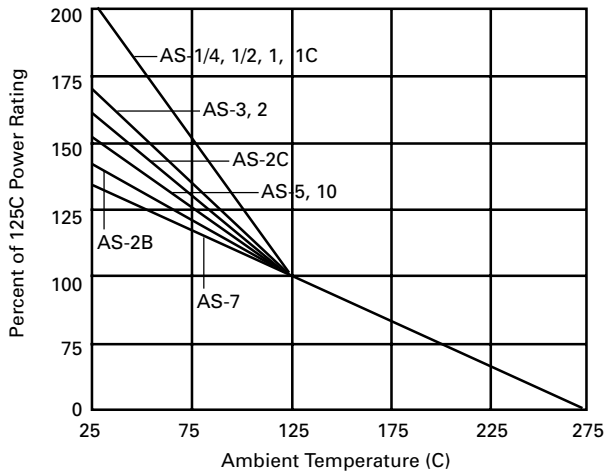
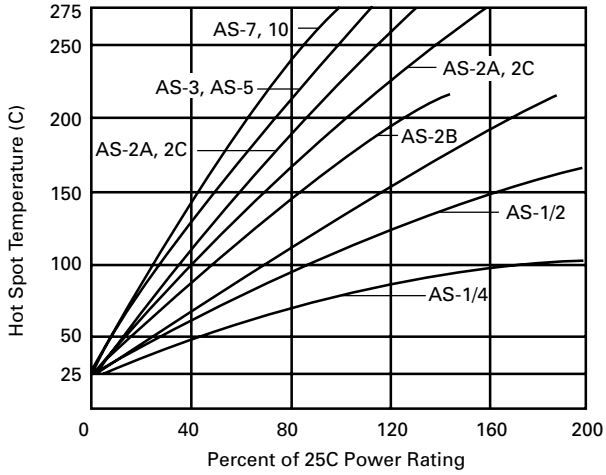
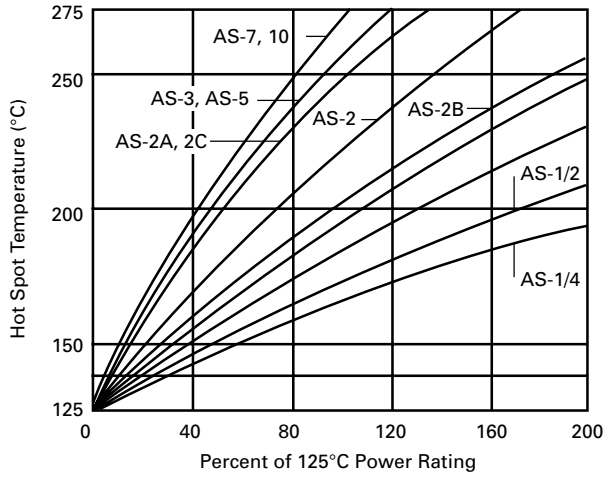
Power Derating



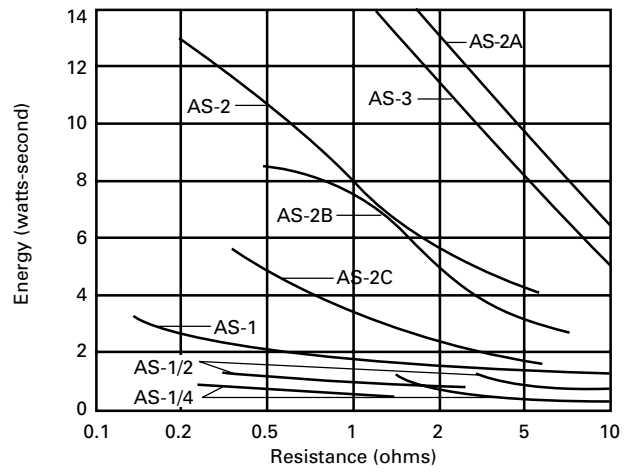
Temperature Rise @ 25°C



Temperature Rise @ 125°C



Selected Pulse-Handling Capability @ 125°C



Environmental Testing at 25°C

Test Condition	Max ΔR
Load Life 1000 hours	1.0%
Moisture Resistance	1.0%
Temperature Cycle	0.5%
Short Time Overload	0.5%
Low Temperature Operation	0.5%
Solder Heat	0.25%
Shock	0.5%
Vibration	0.5%

Packaging

Parts are supplied taped and reeled.
Standard quantity per reel.

Standard Quantities Per Package

AS 1/4, 1/2, 1C	2,000
AS 1, 2, 2B, 2C	1,000
AS 3	1,000
AS 5, 7, 10	500

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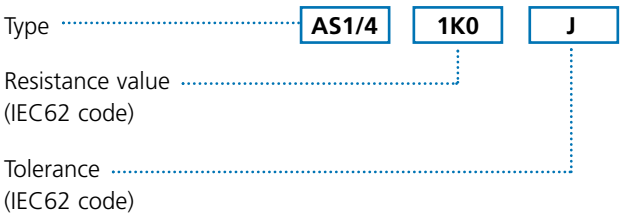
Ordering Procedure

Specify type reference, value and tolerance as shown in this example of AS1/4 1K0 5%:



F	1%
G	2%
J	5%