

# SEMI-PRECISION POWER WIREWOUND RESISTOR

ISO-9001  
Registered

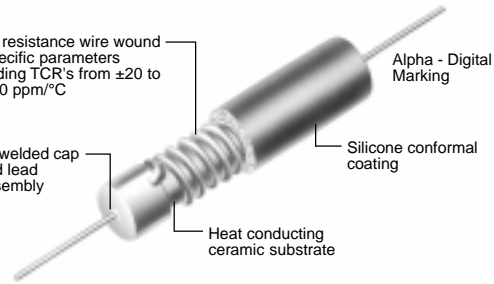


## AS SERIES

- 1/4 watt to 10 watts
- $\pm 5\%$ ,  $\pm 3\%$ ,  $\pm 1\%$ ,  $\pm .5\%$  tolerance
- 0.1 ohm to 175K ohms
- Resistance wire TCR  $\pm 20$  ppm/ $^{\circ}\text{C}$

Alloy resistance wire wound to specific parameters including TCR's from  $\pm 20$  to  $+5500$  ppm/ $^{\circ}\text{C}$

All welded cap and lead assembly



Alpha - Digital Marking

Silicone conformal coating

Heat conducting ceramic substrate

### SPECIFICATIONS:

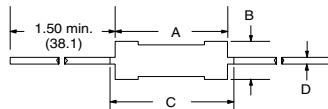
IRC Type	Equivalent MIL-R-26 Style	Power Rating 275 $^{\circ}\text{C}$ Max. Hot Spot (watts)		Commercial Range (ohms)		Non-Inductive Range (ohms)		Available Resistance (ohms)	
		125 $^{\circ}\text{C}$	25 $^{\circ}\text{C}$	Min.	Max.	Min.	Max.	0.5%, 1%	3%, 5%
AS-1/4	RW81	0.5	1	0.1	1.0K	*	*	1-1K	0.1-1K
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/ RW67V	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  $1\mu\text{H}$  at 1MHz.  
To order non-inductive types, add the prefix "N". Example: NAS-1, NAS-2C, etc.

\* Typical inductance of AS-1C  $< 5$  ohms is  $< 1\mu\text{H}$ .  
Lower values available upon request.

### DIMENSIONS (Inches and (mm)):

Please note lead length dimension change on the following two items only:  
AS-2B 1.3 min  
AS-2C 1.3 min



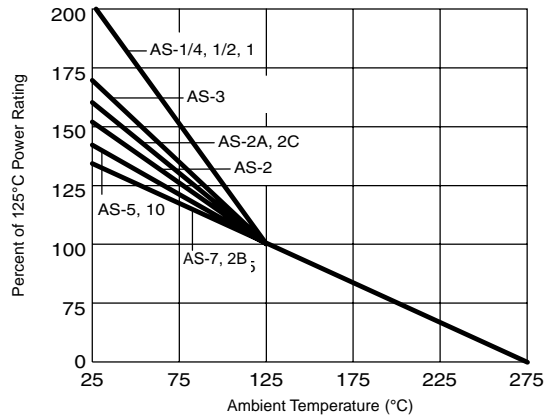
#### NOTE:

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

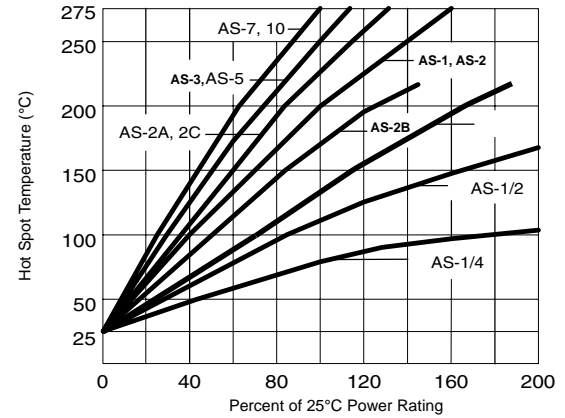
IRC Type	A $\pm 0.032$	B (max)	C (max)	D (Lead Diameter)
AS-1/4	0.250 (6.4)	0.094 (2.4)	0.312 (7.9)	0.020 (0.5)
AS-1/2	0.312 (7.9)	0.094 (2.4)	0.375 (9.5)	0.020 (0.5)
AS-1	0.367 (9.3)	0.125 (3.2)	0.429 (10.9)	0.020 (0.5) 0.025 (0.64)
AS-1C	0.256 (6.5)	0.115 (2.9)	0.303 (7.7)	0.025 (0.64) 0.032 (0.8)
AS-2	0.480 (12.2)	0.250 (6.3)	0.600 (15.2)	0.032 (0.8)
AS-2B	0.540 (13.7)	0.219 (5.6)	0.663 (16.6)	0.032 (0.8)
AS-2C	0.489 (11.0)	0.157 (4.0)	0.594 (15.1)	0.032 (0.8)
AS-3	0.687 (17.5)	0.282 (7.2)	0.812 (20.6)	0.040 (1.0)
AS-5	0.875 (22.2)	0.344 (8.8)	0.980 (24.9)	0.040 (1.0)
AS-7	1.250 (31.8)	0.344 (8.8)	1.375 (35.0)	0.040 (1.0)
AS-10	1.812 (46.0)	0.385 (9.8)	1.937 (49.2)	0.040 (1.0)

\*Leads 60/40 are solder plated. AS-1C leads are copper. All others are 40% conductivity copper sheathed steel.

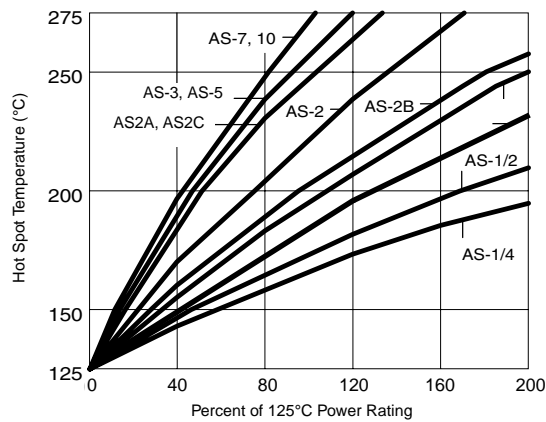
**POWER DERATING:**



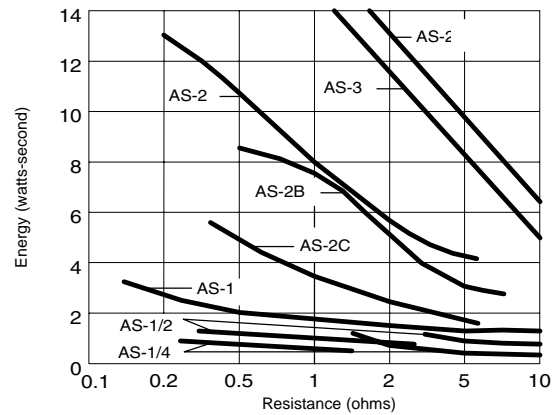
**TEMPERATURE RISE @ 25°C:**



**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%

**HOW TO ORDER:**

Sample Part No.:

**AS-3 27R0 0.25%**

Type

Power

3 = 3 watts  
(See specification chart for other power ratings)

Resistance Value

Expressed in ohms  
(Standard EIA/MIL Values)

Tolerance

±5%, ±3%, ±1%, ±0.5%