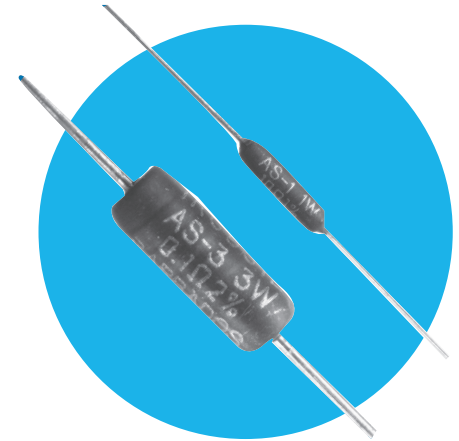


## Semi-Precision Power Wirewound Resistor

### (N)AS Series

- 0.25 to 10 watts
- Tolerance down to  $\pm 0.5\%$
- 0.1 ohm to 175K ohms
- Resistance wire TCR  $\pm 20$  ppm/ $^{\circ}\text{C}$
- Non inductive (NAS) option
- Pb-free option is RoHS compliant



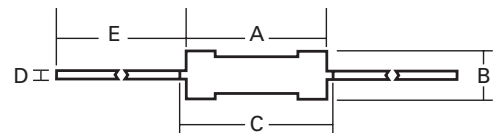
 All Pb-free parts comply with EU Directive 2011/65/EU (RoHS2)

### Electrical Data

Type	Equivalent MIL-R-26 Style	Power Rating (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%	
(N)AS-1/4	RW81	0.25	1	0R1	1K0	0R2	60R	1R0-1K0	0R1-1K0	
(N)AS-1/2		0.5	1	0R1	6K0	0R5	60R	1R0-6K0	0R1-6K0	
(N)AS-1	RW70U	1	2	0R1	7K5	0R2	3K8	1R0-7K5	0R1-7K5	
(N)AS-1C		1	2	R05	2K0	10R	1K0	1R0-2K0	R05-2K0	
(N)AS-2	RW79U	2	3	0R1	20K	R25	10K	1R0-20K	0R1-20K	
(N)AS-2B		3	4	0R1	24K	0R1	12K	1R0-24K	0R1-24K	
(N)AS-2C		2	3	0R1	18K	0R2	7K5	1R0-18K	0R1-18K	
(N)AS-3		3	5	0R1	30K	0R1	15K	1R0-30K	0R1-30K	
(N)AS-5	RW74U	5	7	0R1	60K	0R1	30K	1R0-60K	0R1-60K	
(N)AS-7		7	9	0R1	90K	0R2	45K	1R0-90K	0R1-90K	
(N)AS-10	RW78U	10	14	0R1	175K	0R2	50K	1R0-175K	0R1-175K	

### Physical Data

Dimensions Inches (mm)					
Type	A $\pm 0.032$ (0.81)	B (max)	C (max)	D (nom)	E (min)
(N)AS-1/4	0.250(6.4)	0.094 (2.4)	0.312 (7.9)	0.020 (0.5)	1.50 (38.1)
(N)AS-1/2	0.312(7.9)	0.094 (2.4)	0.375 (9.5)	0.020 (0.5)	1.50 (38.1)
(N)AS-1	0.367(9.3)	0.125 (3.2)	0.429 (10.9)	0.020 (0.5)	1.50 (38.1)
(N)AS-1C	0.256(6.5)	0.115 (2.9)	0.303 (7.7)	0.025 (0.64)	1.50 (38.1)
(N)AS-2	0.480(12.2)	0.250 (6.3)	0.600 (15.2)	0.032 (0.8)	1.50 (38.1)
(N)AS-2B	0.540(13.7)	0.219 (5.6)	0.663 (16.6)	0.032 (0.8)	1.30 (33.0)
(N)AS-2C	0.489(11.0)	0.157 (4.0)	0.594 (15.1)	0.032 (0.8)	1.30 (33.0)
(N)AS-3	0.687(17.5)	0.282 (7.2)	0.812 (20.6)	0.040 (1.0)	1.50 (38.1)
(N)AS-5	0.875(22.2)	0.344 (8.8)	0.980 (24.9)	0.040 (1.0)	1.50 (38.1)
(N)AS-7	1.250(31.8)	0.344 (8.8)	1.375 (35.0)	0.040 (1.0)	1.50 (38.1)
(N)AS-10	1.812(46.0)	0.385 (9.8)	1.937 (49.2)	0.040 (1.0)	1.50 (38.1)



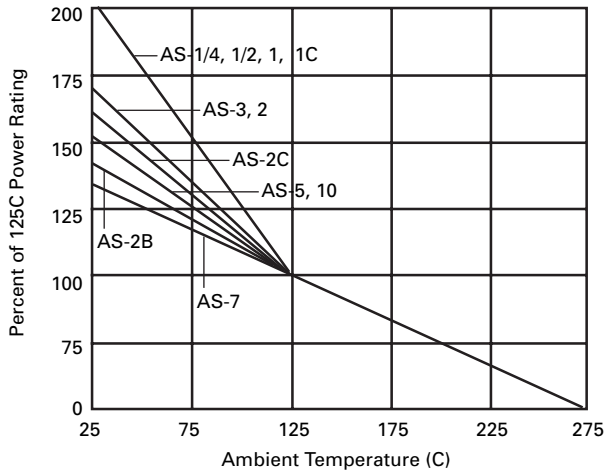
#### General Note

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

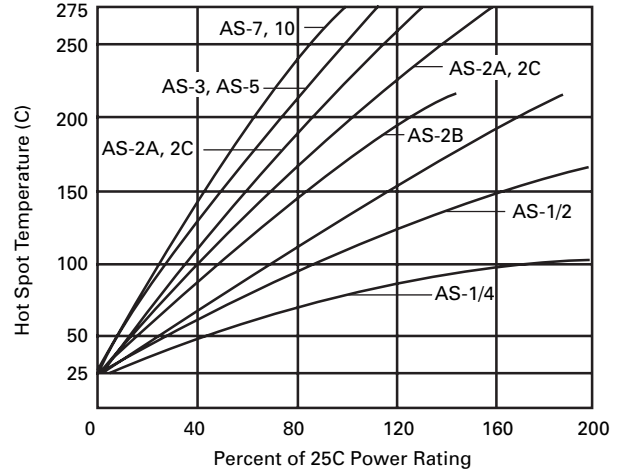
(N)AS Series

## Performance Data

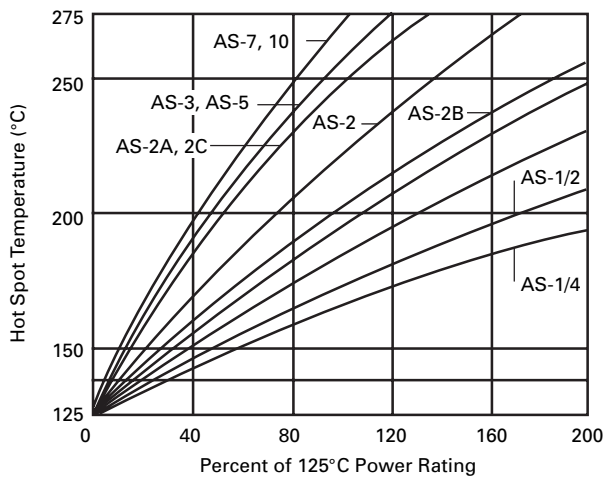
Power Derating



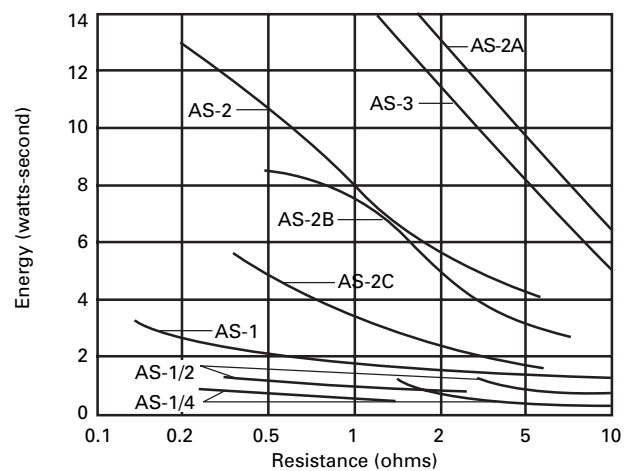
Temperature Rise @ 25°C



Temperature Rise @ 125°C



Selected Pulse-Handling Capability @ 125°C



## Environmental Testing

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%

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(N)AS Series

## Ordering Procedure

This product has two valid part numbers:

**European (Welwyn) Part Number: AS3-27KFI** (AS3, 27 kilohms  $\pm 1\%$ , Pb-free)

	A	S	3	-	2	7	K	F	I
1	2		3			4	5		

1	2	3	4	5	
Winding	Type	Value	Tolerance	Termination & Packing	
Omit for standard	AS1/4, AS1/2	E24 = 3/4 characters R = ohms K = kilohms	D = $\pm 0.5\%$	I = Pb-free, Standard packing	
	AS1, AS1C		F = $\pm 1\%$	AS1/4, 1/2, 1C	up to 2000/reel
N = non-inductive	AS2, AS2B		H = $\pm 3\%$	AS1, 2, 2B, 2C, 3, 5, 7	1000/reel
	AS2C, AS3		J = $\pm 5\%$	AS10	500/reel
	AS5, AS7, AS10				

**USA (IRC) Part Number: AS32702FLF** (AS3, 27 kilohms  $\pm 1\%$ , Pb-free)

	A	S	3	2	7	0	2	F	L	F
1	2		3			4	5			

1	2	3	4	5	
Winding	Type	Value	Tolerance	Termination & Packing	
Omit for standard	AS1/4, AS1/2	3 digits + multiplier	D = $\pm 0.5\%$	Omit for SnPb, Standard packing	
	AS1, AS1C		F = $\pm 1\%$	LF = Pb-free, Standard packing	
N = non-inductive	AS2, AS2B	R = ohms for values <100 ohms	H = $\pm 3\%$	AS1/4, 1/2, 1C	up to 2000/reel
	AS2C, AS3		J = $\pm 5\%$	AS1, 2, 2B, 2C, 3, 5, 7	1000/reel
	AS5, AS7, AS10			AS10	500/reel

**General Note**

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