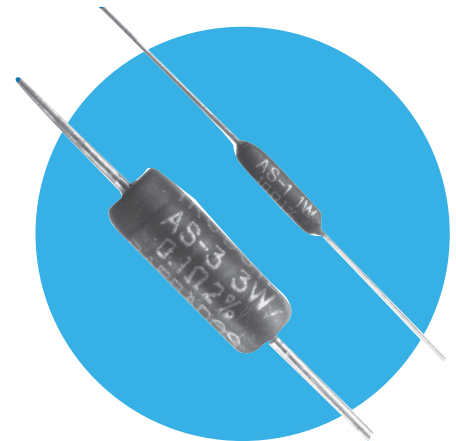


# Semi-Precision Power Wirewound Resistor

## (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



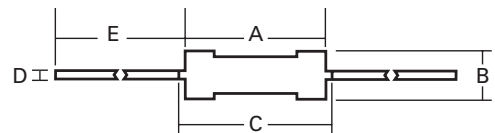
 All Pb-free parts comply with EU Directive 2011/65/EU amended by (EU) 2015/863 (RoHS3)

## 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)



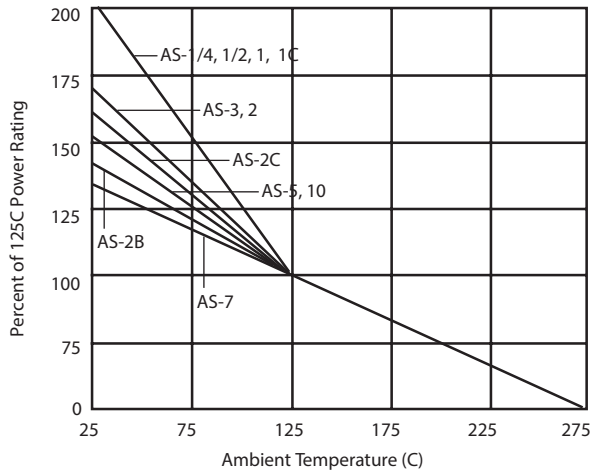
### General Note

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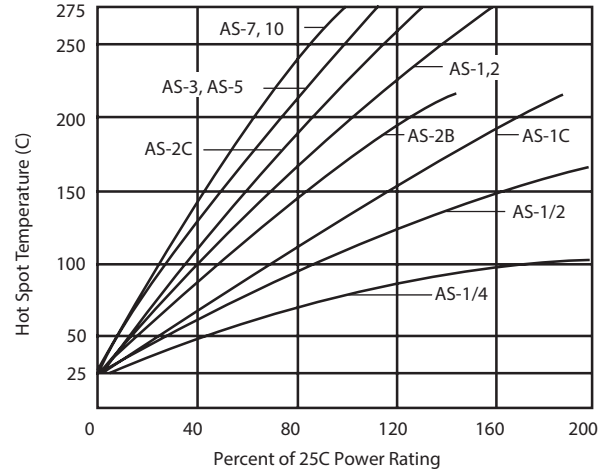
(N)AS Series

## Performance Data

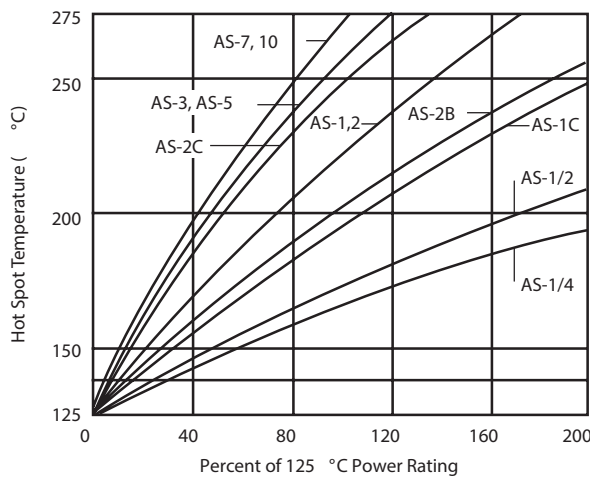
Power Derating



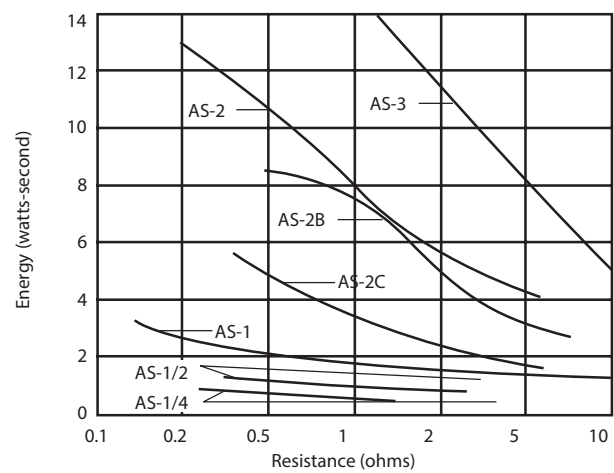
Temperature Rise @ 25°C



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%

**General Note**

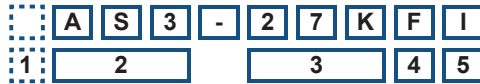
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(N)AS Series

## Ordering Procedure

This product has two valid part numbers:

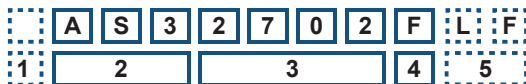
**European (Welwyn) Part Number: AS3-27KFI** (AS3, 27 kilohms  $\pm 1\%$ , Pb-free)



1	2	3	4	5	
Winding	Type	Value	Tolerance	Termination & Packing	
Omit for standard	AS1/4, AS1/2 AS1, AS1C	E24 = 3/4 characters	D = $\pm 0.5\%$	I = Pb-free, Standard packing bulk*	
N = non-inductive	AS2, AS2B AS2C, AS3 AS5, AS7, AS10	R = ohms K = kilohms	F = $\pm 1\%$	AS1/4, 1/2, 1, 1C, 2, 2B, 2C, 3, 5	1000/box
			H = $\pm 3\%$		
			J = $\pm 5\%$	AS7, 10	500/box

\* Tape and reel available on request

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



1	2	3	4	5	
Winding	Type	Value	Tolerance	Termination & Packing	
Omit for standard	AS1/4, AS1/2 AS1, AS1C	3 digits + multiplier	D = $\pm 0.5\%$	LF=Pb-free, Omit for SnPb	
N = non-inductive	AS2, AS2B AS2C, AS3 AS5, AS7, AS10	R = ohms for values <100 ohms	F = $\pm 1\%$	Standard packing bulk*	
			H = $\pm 3\%$	AS1/4, 1/2, 1, 1C, 2, 2B 2C, 3, 5	1000/box
			J = $\pm 5\%$	AS7, 10	500/box

\* Tape and reel available on request

### General Note

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# Mouser Electronics

Authorized Distributor

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[AS21R00FTR](#) [AS23320F](#) [AS23321F](#) [AS28251FTR](#) [AS2B100JLF957](#) [AS2B10K0J](#) [AS2B1200F](#) [AS2B12R0JTR](#)  
[AS2B1R00F](#) [AS2B36R5FTR](#) [AS2B3R30J](#) [AS2B4750FTR](#) [AS2B5R00FTR](#) [AS2BR200F](#) [AS2BR500F](#)  
[AS2BR500FTR](#) [AS2C3010FTR](#) [AS2C3301JTR](#) [AS2R220J](#) [AS2R220JTR](#) [AS315R0J](#) [AS31K50J](#) [AS510R0F](#)  
[AS510R0JLF](#) [AS510R0JLF-965](#) [AS51500JTR](#) [AS52701JTR](#) [AS52R00JLF](#) [AS54220F](#) [AS55601J](#) [AS5R100J](#)  
[AS71600FTR](#) [NAS51600F](#) [AS-1/4-1R00-2%](#) [AS520R0FLF](#) [AS550R0JLF](#) [AS53900JLF](#) [AS2R500FLFTR](#)  
[AS1/2400RFLF](#) [AS1CR835F](#) [AS1CR835F-TAG](#) [AS53902JLF](#) [AS21002J](#) [AS22R40F](#) [AS21000J](#) [AS1/26R80J](#)  
[AS55601JLF](#) [AS125R0BLF](#) [AS1/21141F](#) [AS1CR050JTR](#) [AS52000JTR](#) [AS745R0J](#) [AS2BR430F](#) [AS2B36R5FLFTR](#)  
[AS1CR050HLF](#) [AS1C1201FLFTR](#) [NAS11R00JLFTR](#) [AS34K30JLF](#) [AS527R0JLF](#) [AS1/42R20JLF](#) [AS58R00JLF970](#)  
[AS2B2R00F](#) [AS342R2FLF936](#) [AS2B8R20FTR](#) [AS2B3R48F](#) [AS25100FLF](#) [AS21001FLF](#) [AS520R0F](#) [AS24R12FLF](#)  
[AS21R00FTRLF](#)