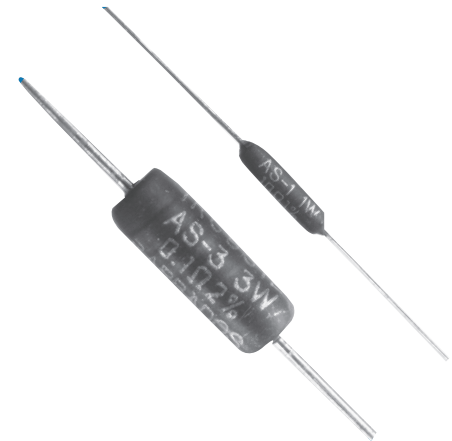


## Semi-Precision Power Wirewound Resistor



### (N)AS Series

- 0.25 to 10 watts
- Tolerance down to  $\pm 0.5\%$
- 0.1 ohm to 150K ohms
- Resistance wire TCR  $\pm 20$  ppm/ $^{\circ}\text{C}$
- Non inductive (NAS) option
- Pb-free option is RoHS compliant

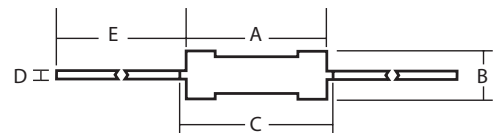
All Pb-free parts comply with EU Directive 2011/65/EU amended by (EU) 2015/863 (RoHS3)

### Electrical Data

Type	Equivalent MIL-R-26 Style	Power Rating (watts)		AS Standard Range (ohms)		NAS Non-inductive Range (ohms)		Available Tolerance (%)	
		125 $^{\circ}\text{C}$	25 $^{\circ}\text{C}$	Min.	Max.	Min.	Max.	<1R0	$\geq 1\text{R}0$
(N)AS-1/4	RW81	0.25	1	0R2	4K0	1R0	500R	3, 5	0.5, 1, 3, 5
(N)AS-1/2		0.5	1	0R24	6K0	1R0	3K0		
(N)AS-1	RW70U	1	2	0R1	7K5	0R1	3K8		
(N)AS-1C		1	2	R05	2K0	10R	1K0		
(N)AS-2	RW79U	2	3	0R1	20K	0R5	10K		
(N)AS-2B		3	4	0R1	33K	0R5	12K		
(N)AS-2C		2	3	0R1	18K	0R2	7K5		
(N)AS-3		3	5	0R1	30K	0R5	15K		
(N)AS-5	RW74U	5	7	0R1	60K	0R8	30K		
(N)AS-7		7	9	0R1	90K	1R0	45K		
(N)AS-10	RW78U	10	14	0R1	150K	0R3	51K		

### 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)



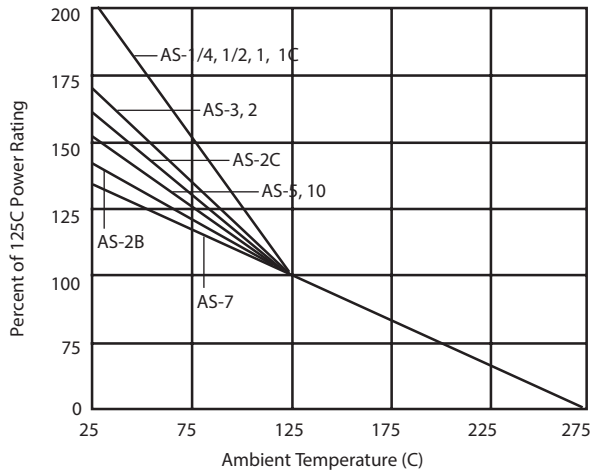
#### General Note

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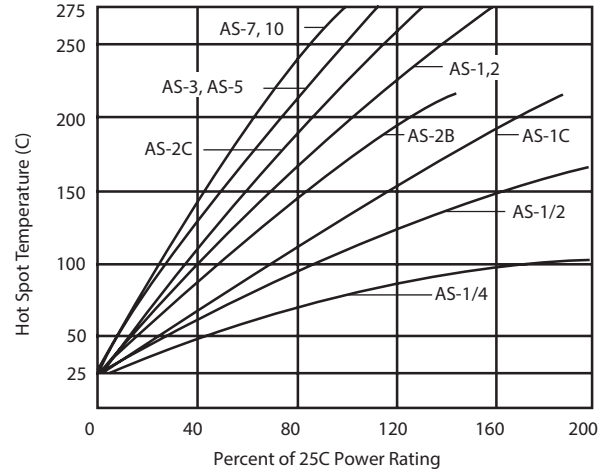
## (N)AS Series

### Performance Data

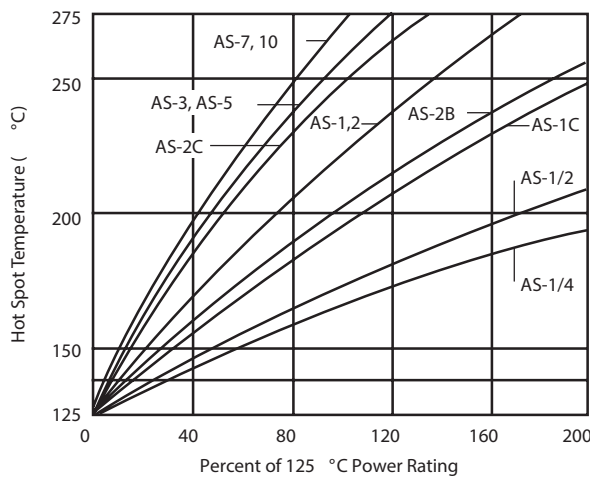
Power Derating



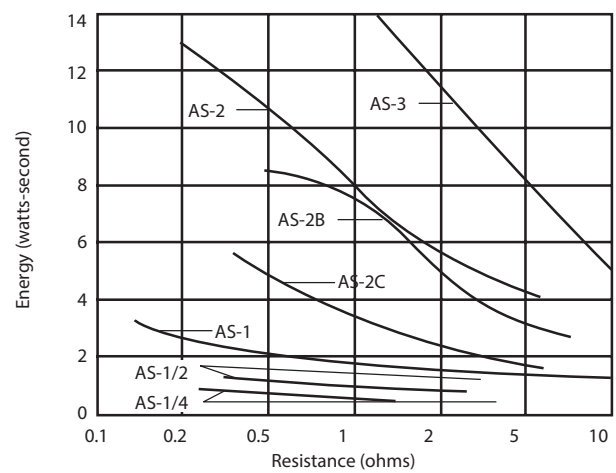
Temperature Rise @ 25°C



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

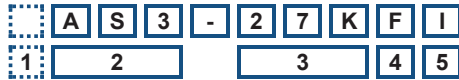
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## (N)AS Series

### Ordering Procedure

This product has two valid part numbers:

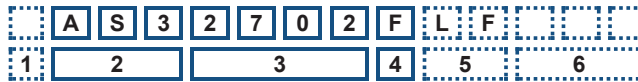
**European (Welwyn) Part Number: AS3-27KFI** (AS3, 27 kilohms ±1%, Pb-free)



1 Winding	2 Type	3 Value	4 Tolerance	5 Termination & Packing <sup>1</sup>	
Omit for standard	AS1/4, AS1/2 AS1, AS1C AS2, AS2B AS2C, AS3 AS5, AS7, AS10	E24 = 3/4 characters R = ohms K = kilohms	D = ±0.5%	I = Pb-free, Standard pack (73mm tape & reel)	
N = non-inductive			F = ±1%	Tape & reel pack quantities	
			H = ±3%	AS-1/4 to AS-7	1000/reel
			J = ±5%	AS-10	500/reel

Note 1: For alternative packing options, use USA part number format.

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



1 Winding	2 Type	3 Value	4 Tolerance	5 Termination	6 Packing <sup>1</sup>		
Omit for standard	AS1/4, AS1/2 AS1, AS1C AS2, AS2B AS2C, AS3 AS5, AS7, AS10	3 digits + multiplier R = ohms for values <100 ohms	D = ±0.5%	Omit for SnPb	Omit for standard (73mm) tape & reel		
N = non-inductive			F = ±1%	LF = Pb-free	BLK	All sizes	Bulk
			H = ±3%	TAF	AS-1/4, AS-1C	Non-standard (63.5mm) tape & reel	
			J = ±5%		AS-1, AS-1C	Non-standard (52.4mm) tape & reel	
	TBD	AS-2	Non-standard (63.5mm) tape & reel				
	TBC	AS-2, AS-2B	Non-standard (52.4mm) tape & reel				
Tape & reel pack quantities							
					AS-1/4 to AS-7	1000/reel	
					AS-10	500/reel	

Note 1: For full details see PS002 - Packing Specification Axial Resistors (IRC Origin):

<https://www.ttelectronics.com/TTElectronics/media/ProductFiles/Resistors/ApplicationNotes/PS002-Packing-of-Axial-Resistors-IRC-Origin.pdf>

#### General Note

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