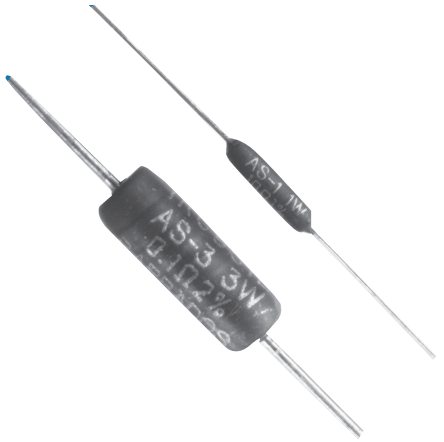
Resistors

Semi-Precision Power Wirewound Resistor



(N)AS Series

- 0.25 to 10 watts
- Tolerance down to ±0.5%
- 0.1 ohm to 150K ohms
- Resistance wire TCR ±20 ppm/°C
- Non inductive (NAS) option
- Pb-free option is RoHS compliant

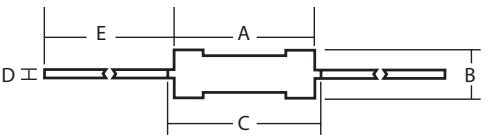
All Pb-free parts comply with EU Directive 2011/65/EU amended by (EU) 2015/863 (RoHS3)

Electrical Data

Type	Equivalent MIL-R-26 Style	Power Rating (watts)		AS Standard Range (ohms)		NAS Non-inductive Range (ohms)		Available Tolerance (%)	
		125°C	25°C	Min.	Max.	Min.	Max.	<1R0	≥1R0
(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 ±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.

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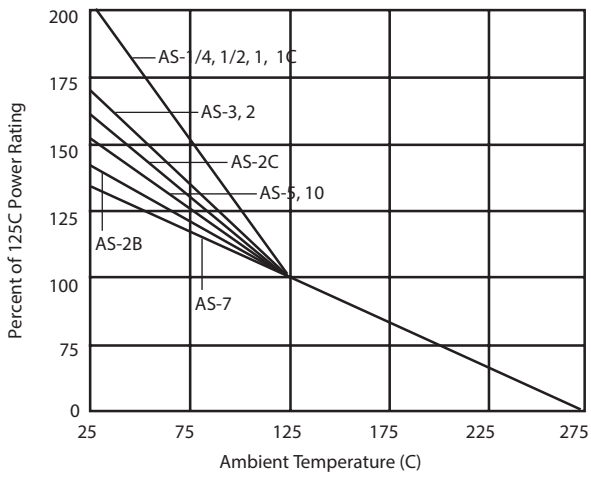
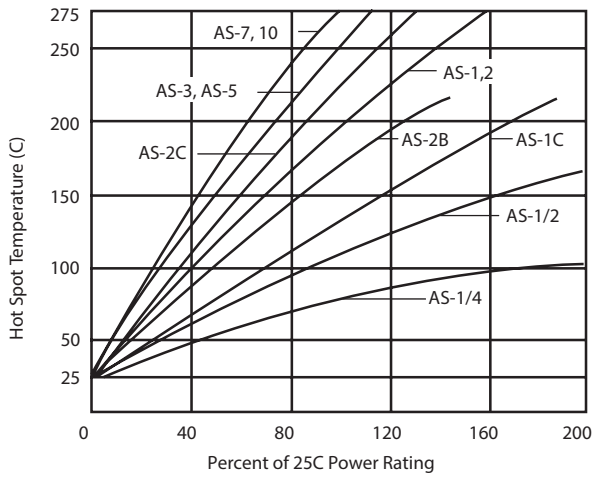
Performance Data

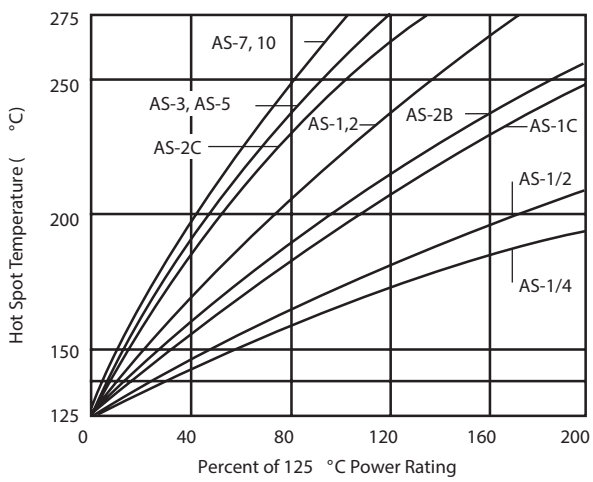
Power Derating



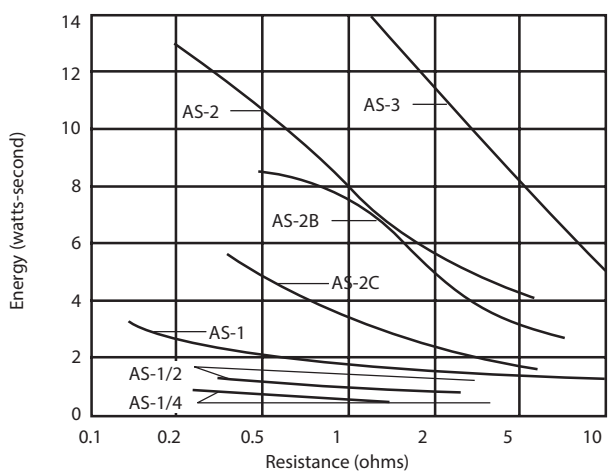
Temperature Rise @ 25°C



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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Ordering Procedure

This product has two valid part numbers:

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

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

1 Winding	2 Type	3 Value	4 Tolerance	5 Termination & Packing	
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 packing bulk*	
N = non-inductive			F = ±1%	AS1/4, 1/2, 1, 1C, 2, 2B, 2C, 3, 5	1000/box
			H = ±3%		
			J = ±5%	AS7, 10	500/box

* Tape and reel available on request

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

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

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

* Tape and reel available on request

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