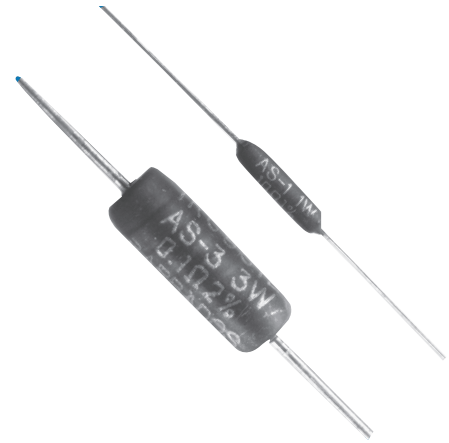


Semi-Precision Non-Inductive Power Wirewound Resistors

NAS Series

Features

- 0.25 to 10 watts
- Tolerance down to $\pm 0.5\%$
- 0.1 ohm to 51K ohms
- Resistance wire TCR ± 20 ppm/ $^{\circ}\text{C}$
- Non-inductive windings
- Pb-free option is RoHS compliant



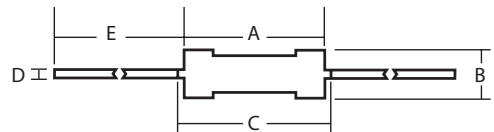
 All Pb-free parts comply with EU Directive 2011/65/EU amended by (EU) 2015/863 (RoHS3)

Electrical Data

Type	Equivalent MIL-R-26 Style	Power Rating (watts)		Value Min.	Value Max	Available Tolerance (%)	
		125 $^{\circ}\text{C}$	25 $^{\circ}\text{C}$			<1R0	\geq 1R0
NAS-1/4	RW81	0.25	1	1R0	500R	3, 5	0.5, 1, 3, 5
NAS-1/2		0.5	1	1R0	3K0		
NAS-1	RW70U	1	2	0R1	3K8		
NAS-1C		1	2	10R	1K0		
NAS-2	RW79U	2	3	0R5	10K		
NAS-2B		3	4	0R5	12K		
NAS-2C		2	3	0R2	7K5		
NAS-3		3	5	0R5	15K		
NAS-5	RW74U	5	7	0R8	30K		
NAS-7		7	9	1R0	45K		
NAS-10	RW78U	10	14	0R3	51K		

Physical Data

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

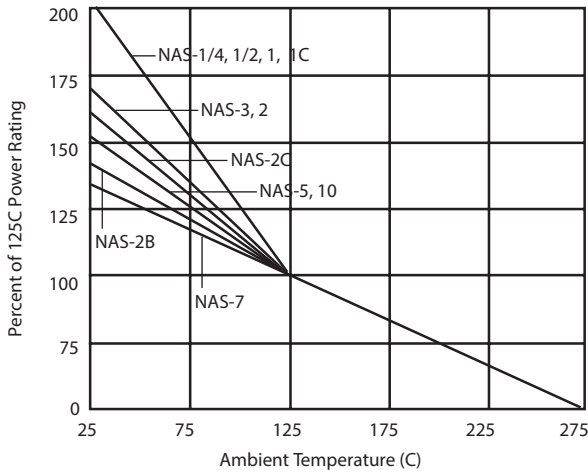
Semi-Precision Non-Inductive Power Wirewound Resistors



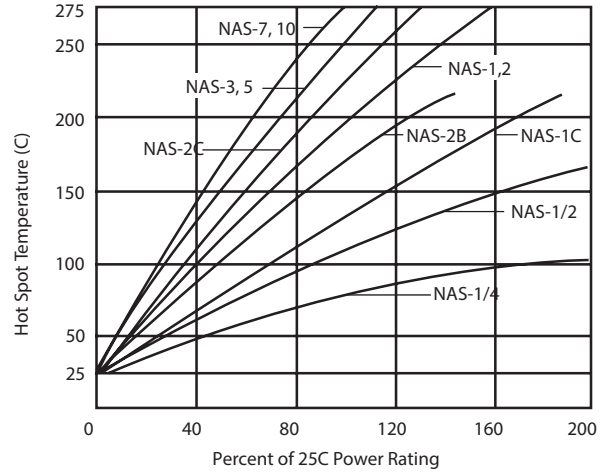
NAS Series

Performance Data

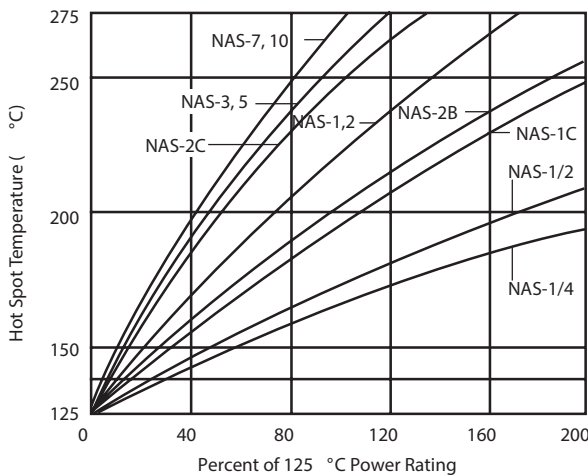
Power Derating



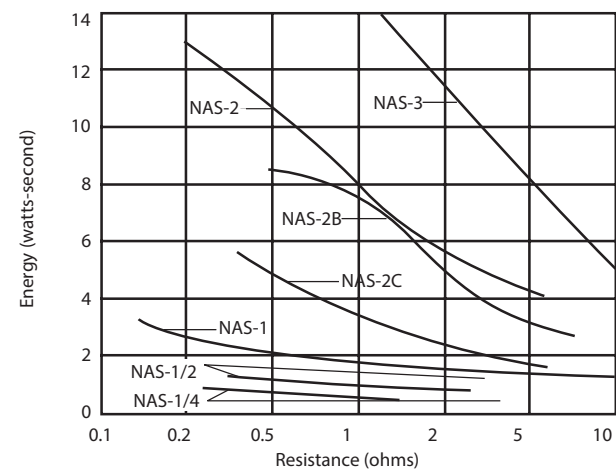
Temperature Rise @ 25°C



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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BI Technologies IRC Welwyn

www.ttelectronics.com/resistors

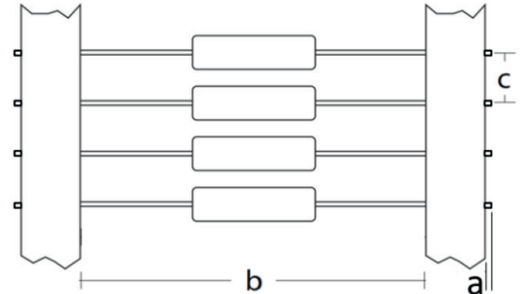
Semi-Precision Non-Inductive Power Wirewound Resistors

NAS Series

Packaging

Resistors are supplied taped and reeled (see Ordering Procedure for reel quantities.) The taping dimensions are shown below.

Taping dimensions, inches (mm)			
Type	a max	b	c
NAS-1/4, NAS-1/2, NAS-1, NAS-1C, NAS-2C	0.062 (1.6)	2.875±0.062 (73±1.6)	0.2±0.015 (5.1±0.4)
NAS-2, NAS-2B, NAS-3, NAS-5, NAS-7, NAS-10	0.062 (1.6)	2.875±0.062 (73±1.6)	0.4±0.015 (10.2±0.4)



Ordering Procedure

This product has two valid part numbers:

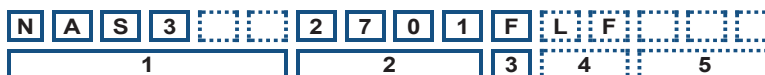
European (Welwyn) Part Number: NAS3-2K7FI (NAS3, 2.7 kilohms ±1%, Pb-free)



1 Type	2 Value	3 Tolerance	4 Termination & Packing ¹	
NAS1/4, NAS1/2 NAS1, NAS1C NAS2, NAS2B NAS2C, NAS3 NAS5, NAS7, NAS10	E24 = 3/4 characters R = ohms K = kilohms	D = ±0.5%	I = Pb-free, Standard pack (73mm tape & reel)	
		F = ±1%	Tape & reel pack quantities	
		H = ±3%	NAS-1/4 to NAS-7	1000/reel
		J = ±5%	NAS-10	500/reel

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

USA (IRC) Part Number: NAS32701FLF (NAS3, 2.7 kilohms ±1%, Pb-free)



1 Type	2 Value	3 Tolerance	4 Termination	5 Packing	
NAS1/4, NAS1/2 NAS1, NAS1C NAS2, NAS2B NAS2C, NAS3 NAS5, NAS7, NAS10	3 digits + multiplier R = ohms for values <100 ohms	D = ±0.5%	Omit for SnPb	Omit for standard (73mm) tape & reel	
		F = ±1%	LF = Pb-free	Tape & reel pack quantities	
		H = ±3%		NAS-1/4 to NAS-7	1000/reel
		J = ±5%		NAS-10	500/reel
Bulk Pack					
B1	NAS-1/4 to NAS7	1000/box			
B05	NAS10	500/box			

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