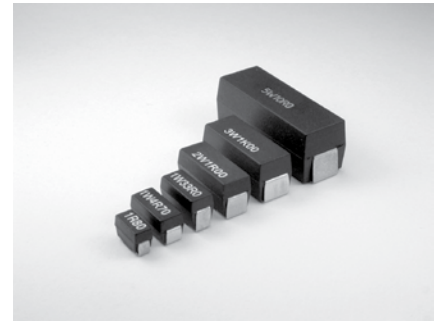


# RWS Precision Power Wirewound SMD Resistor



A compact and precision power resistor, manufactured to the highest standards; reliable and robust but still achieving drift of less than 1% and TCR of 10-90ppm/°C when under rated conditions

- High overload capability for surge and pulse applications
- Low inductance available
- Custom specification available
- RoHS Compliant



## Electrical Specifications

Type	Wattage	Tolerance	Resistance Range		Resistance Range - Non-inductive	
			Min	Max	Min	Max
RWS05	0.5	D (0.5%) F (1%) J (5%)	R005	1K	R1	200R
RWS1	1		R005	5K8	R1	1K2
RWS2	2		R005	14K	R1	2K8
RWS3	3		R01	25K	R1	5K
RWS5	5		R05	50K	R1	10K

## Characteristics

Tolerance (Code):	± 0.5% (D), ± 1% (F), ± 5% (J)
Operating temperature:	-55°C to +155°C
Temperature coefficient:	± 90ppm/°C R1 - R99, ± 50ppm/°C 1R - 10R, ± 20ppm/°C > 10R
Max. working voltage:	$(P \times R)^{1/2}$
Short time overload	5 times rated wattage for 5 seconds
Solderability	Bath temperature 235±5°C, immersion time 2±0.5 seconds JIS C 5201 4.17 >95% of contact face covered new solder
Resistance to solder heat	Bath temperature 260±5°C, immersion time 10±1 seconds JIS C 5201 4.18 ±(0.5% + 0.05mΩ)ΔR
Dielectric withstanding voltage	Test voltage >500V, duration 1 minute JIS C 5201 4.7
Load life	70°C ±2°C, rated DC working voltage applied 1.5 hours on and 0.5 hours off, 1000 hours, ±(2.0% + 0.05mΩ)ΔR

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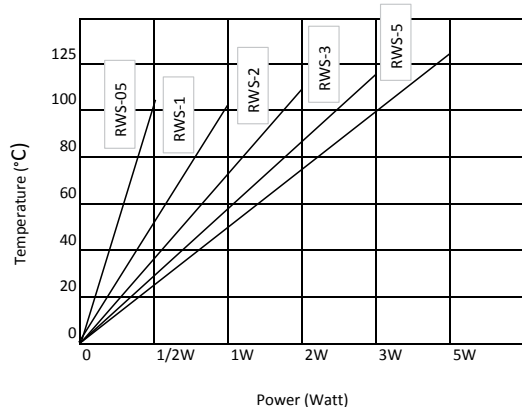
The information contained herein does not form part of a contract and is subject to change without notice. Arcol operate a policy of continual product development, therefore, specifications may change.

It is the responsibility of the customer to ensure that the component selected from our range is suitable for the intended application. If in doubt please ask Arcol.

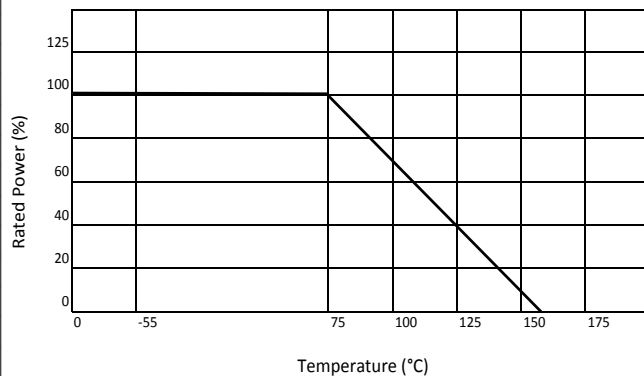
# RWS SMD Precision Power Wirewound Resistor



## Temperature Rise

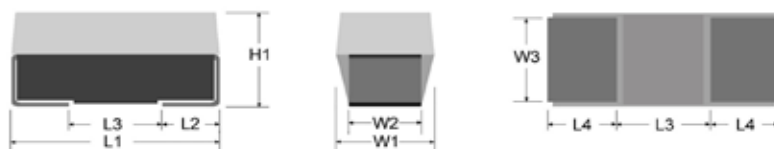


## Derating Curve



## Dimensions (in mm ±0.5)

Type	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	H <sub>1</sub>	W <sub>2</sub>
RWS05	5.08	1.28	2.52	3.25	1.663
RWS1	7.50	1.75	4.00	4.64	2.405
RWS2	11.00	2.00	7.00	4.65	3.59
RWS3	13.50	2.50	8.50	5.65	4.20
RWS5	20.30	3.00	12.30	7.87	4.90



### Solder Pad Dimensions

Type	L <sub>4</sub>	W <sub>3</sub>
RWS05	1.98	2.16
RWS1	2.45	2.95
RWS2	2.75	3.70
RWS3	3.20	4.20
RWS5	3.70	5.10

## Ordering Procedure

Standard Resistor: Series, Resistance Value, Tolerance, Packaging (T&R or Bulk)  
 e.g. RWS1 / NRWS1 (non-inductive) R005 F T&R

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# Mouser Electronics

Authorized Distributor

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## Arcol:

[RWS3 270R F B](#) [RWS1 30R J B](#) [RWS1 100R J B](#) [RWS3 1K J B](#) [RWS05 R49 J B](#) [RWS05 50R J B](#) [RWS3 R22 F B](#)  
[RWS5 1K J B](#) [RWS5 2R7 F B](#) [RWS3 1K F B](#) [RWS3 20R F B](#) [RWS1 4R7 J B](#) [RWS5 3R9 J B](#) [RWS05 2R5 J B](#)  
[RWS5 10R J B](#) [RWS1 1R F B](#) [RWS5 R25 F B](#) [RWS1 R49 J B](#) [RWS1 3R J B](#) [RWS3 120R F B](#) [RWS5 1R8 J B](#)  
[RWS3 R5 F B](#) [RWS3 2R2 J B](#) [RWS05 2R F B](#) [RWS5 2R J B](#) [RWS1 3R F B](#) [RWS5 30R F B](#) [RWS05 1K F B](#) [RWS5](#)  
[R49 F B](#) [RWS5 50R J B](#) [RWS3 R15 F B](#) [RWS1 300R J B](#) [RWS3 27R J B](#) [RWS1 5R J B](#) [RWS5 20R F B](#) [RWS5 R27](#)  
[J B](#) [RWS05 4R9 F B](#) [RWS5 3R9 F B](#) [RWS1 150R F B](#) [RWS05 R05 F B](#) [RWS5 2R7 J B](#) [RWS3 8R2 F B](#) [RWS05 3R](#)  
[J B](#) [RWS3 2R7 F B](#) [RWS05 47R F B](#) [RWS05 2R5 F B](#) [RWS3 2K J B](#) [RWS3 3R F B](#) [RWS1 30R F B](#) [RWS1 2R5 J B](#)  
[RWS1 R5 J B](#) [RWS1 2R7 J B](#) [RWS1 2R F B](#) [RWS3 120R J B](#) [RWS1 4R7 F B](#) [RWS3 R1 J B](#) [RWS3 1R5 F B](#)  
[RWS5 39R F B](#) [RWS1 2R7 F B](#) [RWS1 2K J B](#) [RWS5 27R F B](#) [RWS05 R25 F B](#) [RWS5 150R F B](#) [RWS5 100R J B](#)  
[RWS5 18R F B](#) [RWS05 R05 J B](#) [RWS05 2R2 F B](#) [RWS5 3R3 J B](#) [RWS3 2R F B](#) [RWS5 30R J B](#) [RWS05 1K J B](#)  
[RWS3 1R8 J B](#) [RWS3 R39 J B](#) [RWS5 2R5 F B](#) [RWS05 1R F B](#) [RWS05 2R2 J B](#) [RWS5 180R F B](#) [RWS3 R82 J B](#)  
[RWS3 R12 J B](#) [RWS3 8R2 J B](#) [RWS5 3R J B](#) [RWS5 2K J B](#) [RWS3 R47 F B](#) [RWS3 R47 J B](#) [RWS5 150R J B](#)  
[RWS5 18R J B](#) [RWS05 R25 J B](#) [RWS3 20R J B](#) [RWS05 47R J B](#) [RWS5 2R F B](#) [RWS5 2R5 J B](#) [RWS5 270R J B](#)  
[RWS3 39R F B](#) [RWS3 R27 F B](#) [RWS05 20R J B](#) [RWS05 10R F B](#) [RWS5 R27 F B](#) [RWS1 100R F B](#) [RWS3 2R5 F B](#)  
[RWS5 1R5 F B](#)