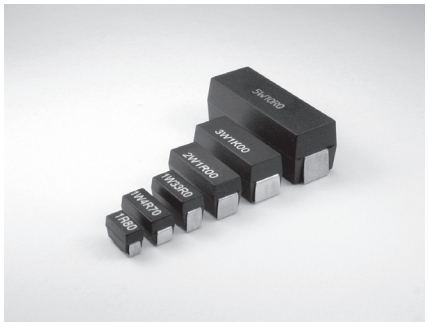
RWS Precision Power Wirewound SMD Resistor

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
- Precision High Power wirewound Resistor
- Low inductance 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	1K2	R1	200R
RWS1	1		R005	5K	R1	1K
RWS2	2		R005	12K	R1	2K4
RWS3	3		R01	20K	R1	4K
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:	$(PxR)^{1/2}$
Short time overload	5 times rated wattage for 5 seconds ±(1.0% + 0.05Ω)ΔR
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% + 0.05Ω)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% + 0.05Ω)ΔR

ARCOL UK Limited,
Threemilestone Ind. Estate,
Truro, Cornwall, TR4 9LG, UK.
T +44 (0) 1872 277431
F +44 (0) 1872 222002
E sales@arcolresistors.com

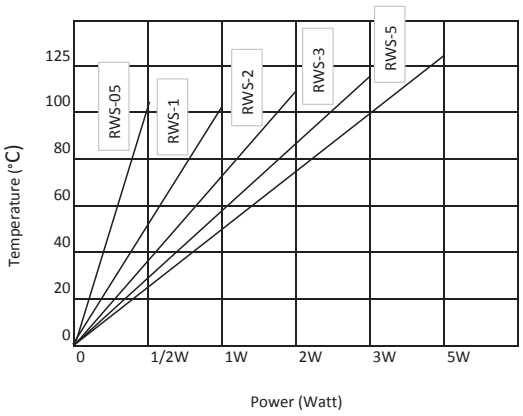
www.arcolresistors.com

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.

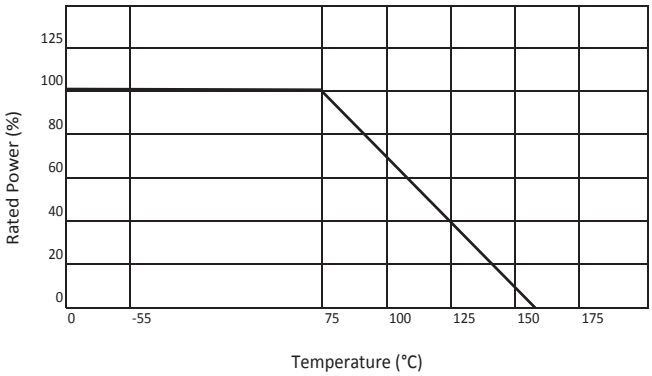
It is the responsibility of the customer to ensure that the component selected from our range is suitable for the intended application. If in doubt please ask ARCOL.

RWS SMD Precision Power Wirewound Resistor

Temperature Rise

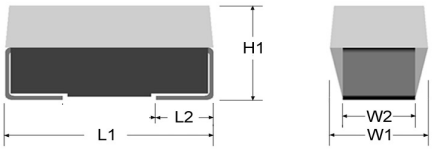


Derating Curve

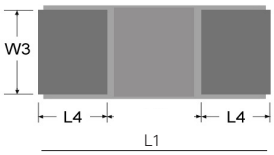


Dimensions (in mm ±0.5)

Type	L_1	L_2	H_1	W_1	W_2
RWS05	5.08	1.28	3.25	2.54	1.663
RWS1	7.50	1.75	4.64	3.50	2.405
RWS2	11.00	2.00	4.65	4.50	3.59
RWS3	13.50	2.50	5.65	5.50	4.20
RWS5	20.30	3.00	7.87	7.62	4.90



Recommended Solder Pad Dimensions		
Type	L_4	W_3
RWS05	2.0	2.2
RWS1	2.5	3.0
RWS2	2.8	4.2
RWS3	3.5	4.8
RWS5	4.0	5.5



Ordering Procedure

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

ARCOL UK Limited,
Threemilestone Ind. Estate,
Truro, Cornwall, TR4 9LG, UK.
T +44 (0) 1872 277431
F +44 (0) 1872 222002
E sales@arcolresistors.com

www.arcolresistors.com

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.