

RWS7 & RWS10 Precision Power Wirewound SMD Resistors



This product has been uniquely designed to meet the rising power requirement for surface mount components. Optimised thermal design is targeted to give greater efficiency and improved surge capacity of up to 5 times for 5 seconds, whilst reducing surface temperature rise compared with other resistors. It has high reliability and has been engineered to reduce long term thermal damage to boards and surrounding components. Available in low inductance format, close TCR and tolerance bands. This product is RoHS compliant.



- Highest power SMD commercially available
- Optimised thermal design
- Excellent overload characteristics
- Very high power density for SMD
- Good stability and low standard TCR
- Low inductance available

Electrical Specifications

Type	Wattage	Tolerance	Resistance Range		Resistance Range Non-inductive	
			Min	Max	Min	Max
RWS7	7	D (0.5%) F (1%) J (5%)	R1	5K	R1	1K
RWS10	10		R1	10K	R1	2K

Characteristics

Operating temperature:	-55°C to +275°C
Temperature coefficient:	± 90ppm/°C R1 - R99, ± 50ppm/°C 1R - 10R, ± 20ppm/°C > 10R
Max. working voltage:	(P×R) ^{1/2}
Short time overload:	5 times rated power for 5 seconds, ±(0.5% + 0.5mΩ) ΔR
Solderability:	Bath temperature 260±5°C, immersion time 5±0.5 seconds JIS C 5201 4.18, > 90% of contact face covered new solder
Life:	Test temperature at 70°C ±2°C, rated DC continuous working voltage applied, 1.5 hours on and 0.5 hours off for 1000 hours, ±(2.0% +0.5mΩ)ΔR

Ordering Procedure

Standard Resistor: Series, Resistance Value, Tolerance, Packaging (T&R or Bulk)
e.g. RWS7 R005 F T&R

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.

RWS7 & RWS10 SMD Precision Power Wirewound Resistor



Temperature Rise



Derating Curve



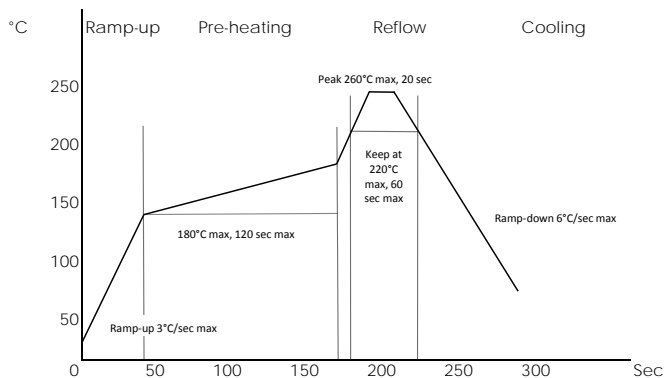
Dimensions (mm ±0.38)

Type	L ₁	L ₂	W ₁	H ₁	W ₂
RWS7	20.5	1.50	9.30	10.30	8.97
RWS10	28.60	2.54	12.00	13.00	11.54

Solder Pad Dimensions			
Type	L ₃	L ₄	W ₃
RWS7	5.70	22.50	11.30
RWS10	14.00	30.60	14.00



Soldering Recommendation



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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Ohmite:

[RWS10 82R J T&R](#) [RWS7 1R8 J T&R](#) [RWS10 120R J T&R](#) [RWS10 15R J T&R](#) [RWS10 33R J T&R](#) [RWS7 15R J T&R](#) [RWS7 R18 J T&R](#) [RWS10 1R8 J T&R](#) [RWS7 3K3 J T&R](#) [RWS7 270R J T&R](#) [RWS10 R10 J T&R](#) [RWS7 33R J T&R](#) [RWS7 56R J T&R](#) [RWS10 1R0 J T&R](#) [RWS7 6R8 J T&R](#) [RWS10 3K3K J T&R](#) [RWS7 3R9 J T&R](#) [RWS7 2K7 J T&R](#) [RWS7 10R J T&R](#) [RWS7 R33 J T&R](#) [RWS10 270R J T&R](#) [RWS10 1K0 J T&R](#) [RWS10 560R J T&R](#) [RWS10 R12 J T&R](#) [RWS7 27R J T&R](#) [RWS10 220R J T&R](#) [RWS10 470R J T&R](#) [RWS7 1K2 J T&R](#) [RWS10 8K2 J T&R](#) [RWS7 3K9 J T&R](#) [RWS10 3K9 J T&R](#) [RWS10 R82 J T&R](#) [RWS10 R22 J T&R](#) [RWS7 4R7 J T&R](#) [RWS7 R10 J T&R](#) [RWS7 1R0 J T&R](#) [RWS10 10K J T&R](#) [RWS7 470R J T&R](#) [RWS7 R68 J T&R](#) [RWS10 100R J T&R](#) [RWS7 120R J T&R](#) [RWS7 2R2 J T&R](#) [RWS7 820R J T&R](#) [RWS7 47R J T&R](#) [RWS7 3R3 J T&R](#) [RWS7 100R J T&R](#) [RWS10 680R J T&R](#) [RWS10 18R J T&R](#) [RWS10 1R2 J T&R](#) [RWS10 R15 J T&R](#) [RWS10 2K2 J T&R](#) [RWS7 1R2 J T&R](#) [RWS7 1K5 J T&R](#) [RWS10 3R3 J T&R](#) [RWS7 12R J T&R](#) [RWS10 47R J T&R](#) [RWS10 R47 J T&R](#) [RWS7 220R J T&R](#) [RWS10 12R J T&R](#) [RWS7 R12 J T&R](#) [RWS10 R27 J T&R](#) [RWS7 180R J T&R](#) [RWS7 4K7 J T&R](#) [RWS10 R39 J T&R](#) [RWS7 1K8 J T&R](#) [RWS7 390R J T&R](#) [RWS10 820R J T&R](#) [RWS7 1K0 J T&R](#) [RWS10 R68 J T&R](#) [RWS10 2K7K J T&R](#) [RWS7 1R5 J T&R](#) [RWS10 390R J T&R](#) [RWS10 4K7 J T&R](#) [RWS10 68R J T&R](#) [RWS10 3R9 J T&R](#) [RWS10 1K8 J T&R](#) [RWS7 R56 J T&R](#) [RWS10 5R6 J T&R](#) [RWS10 R56 J T&R](#) [RWS10 8R2 J T&R](#) [RWS7 22R J T&R](#) [RWS10 56R J T&R](#) [RWS10 6K8 J T&R](#) [RWS10 330R J T&R](#) [RWS10 22R J T&R](#) [RWS7 R47 J T&R](#) [RWS10 1K5 J T&R](#) [RWS7 560R J T&R](#) [RWS7 82R J T&R](#) [RWS10 150R J T&R](#) [RWS7 R27 J T&R](#) [RWS7 R82 J T&R](#) [RWS10 2R7 J T&R](#) [RWS7 330R J T&R](#) [RWS7 39R J T&R](#) [RWS7 68R J T&R](#) [RWS10 4R7 J T&R](#) [RWS10 6R8 J T&R](#) [RWS10 10R J T&R](#) [RWS7 8R2 J T&R](#)