## 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**

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

Short time overload: 5 times rated power for 5 seconds,  $\pm (0.5\% + 0.5 \text{m}\Omega) \Delta R$ 

Solderability: Bath temperature  $260\pm5^{\circ}$ C, immersion time  $5\pm0.5$  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,  $\pm (2.0\% + 0.5 \text{m}\Omega)\Delta R$ 

#### **Ordering Procedure**

Standard Resistor: Series, Resistance Value, Tolerance,

Packaging (T&R or Bulk) e.g. RWS7 R005 F T&R

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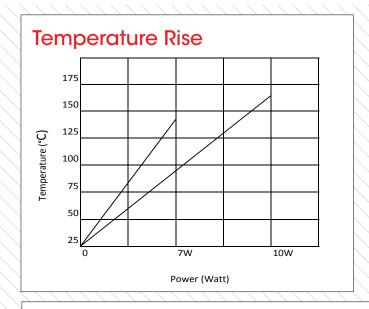
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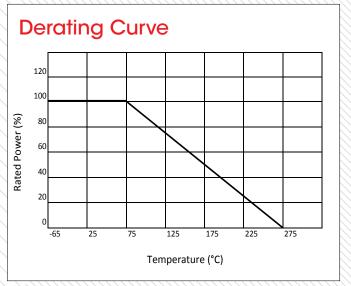
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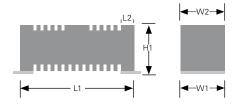




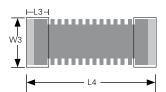


### Dimensions (mm ±0.38)

Туре	L <sub>1</sub>	L <sub>2</sub>	W <sub>1</sub>	H <sub>1</sub>	W <sub>2</sub>
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						
Туре	L <sub>3</sub>	L <sub>4</sub>	W <sub>3</sub>			
RWS7	5.70	22.50	11.30			
RWS10	14.00	30.60	14.00			



# Soldering Recommendation °C Ramp-up Pre-heating Reflow Cooling Peak 260°C max, 20 sec Weep at 220°C max, 50 sec max 150 180°C max, 120 sec max Ramp-down 6°C/sec max

200

250

300

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