

WCR WATER COOLED, HIGH POWER RESISTORS



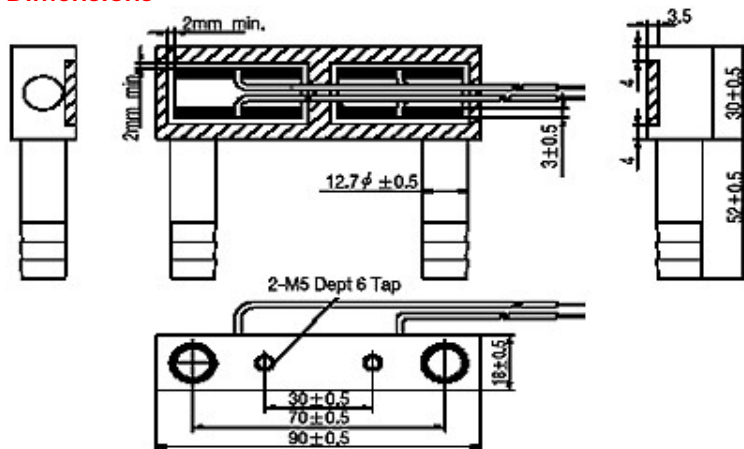
Features and Applications

These are 500W & 1000W high power resistors exhibiting very low operating temperatures. These models offer very low inductance and high surge handling capacity. They consist of a flat resistive element with twisted air leads. A 5Kv dielectric strength is ensured with an alumina substrate. The low operating temperature of the element gives a low failure rate in high-density, compact instruments and equipment. These models can be used in snubber resistors, GTO and IGBT in electric power conversion systems.

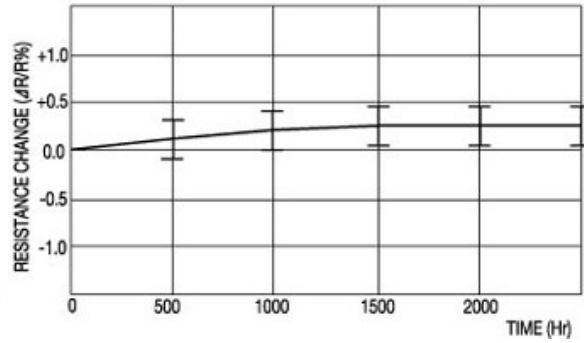
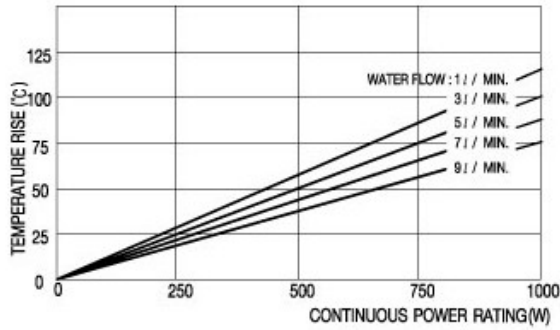
Specifications and Performance

Rated Power	WCR500: 500W (water cooling), WCR1000: 1000W (water cooling)	
Resistance Range	10, 20, 40 120 ohms	
T.C.R	250ppm/C	
Resistance Tolerance	10%	
Dielectric Strength	2000VAC Between terminals and fin	
Max. Water Pressure	6kg/cm squared	
Volume of water flow	6 litres/min	
Std. Water temp.	41C	
Min. water temp.	Over dew point	
Water temp. rise	1.4C	At outlet (power rating)
Fin temp. rise	14.0C	on the M5 tapping screw. (rated power)
Surface temp. rise	50.0C	On the Heat sink surface Resistor surface temperature. (rated power)
Max. surf. Temp	110C	On the element surface
Pressure loss	0.06 kg/cm squared	
Weight	355g	

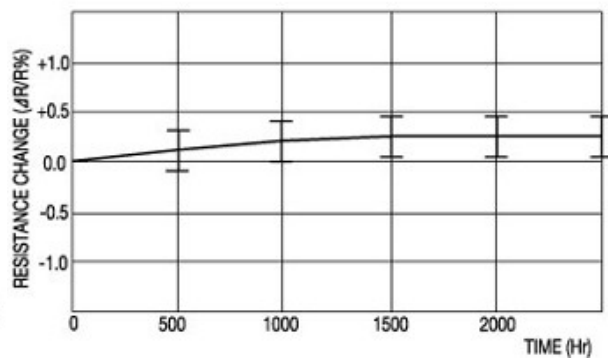
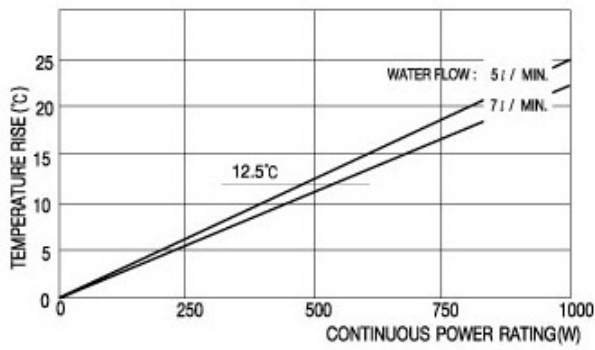
Dimensions



Surface Temperature Rise VS Power Rating & Load Life



Surface Temperature Rise VS Power Rating & Load Life



Cooling Water Temperature Rise VS Power Rating

