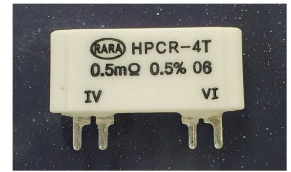




# HPCR-4T High Power Precision Current Sensing Resistors

High Power Precision Current Sensing Resistors (HPCR4T), designed with four terminals, are distinguished by excellent long-term stability and TCR. The Kelvin connections of this device enable high-precision measurements even with low resistance values. The HPCR4T features a non-inductive copper manganin element inserted into a ceramic case, finally sealed with cement molding. This resistor exhibits low inductance and high pulse power capabilities. Common applications include power modules, frequency converters, and switch mode power supplies.



## GENERAL SPECIFICATION

Model	*Current Rating[A]	Resistance Range[Ω]	Resistance Tolerance[%]	TCR[ppm/°C]	Operating Temp. Range
HPCR-4T	65	0.5m	±0.5, ±1, ±2	±30ppm/°C	-25°C~+150°C
	60	1m			
	50	2m			
	40	3m			
	35	**4m			

\* Max. Current 70A at 0.5mΩ

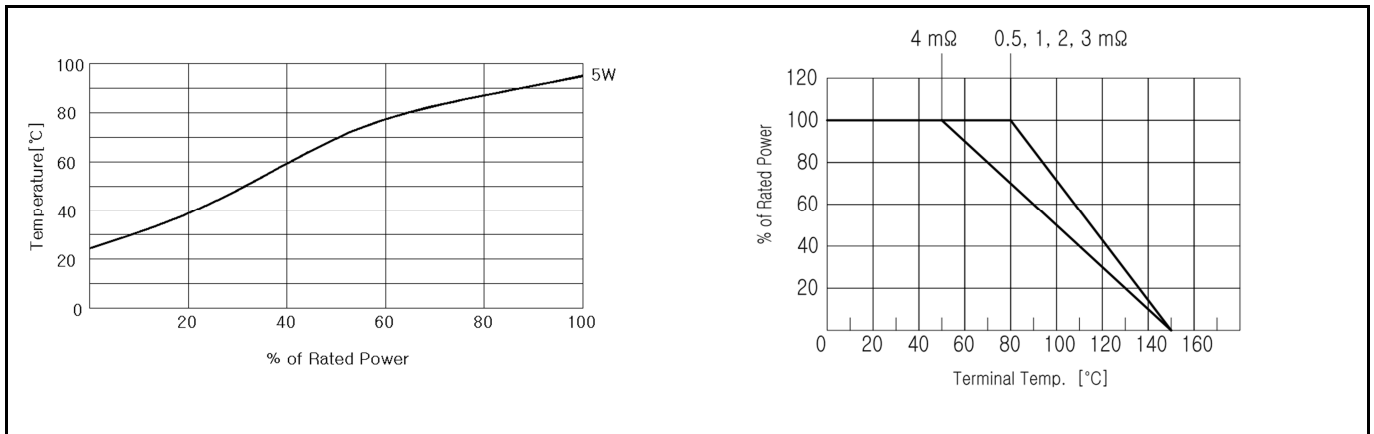
\*\* Max. Terminal temp. 45°C

## CHARACTERISTICS

Values in [ ] mean changed in Ω after test

Temperature Range		-25°C~+150°C
Insulation Resistance		Min. 20MΩ at DC500V
Dielectric Withstanding Voltage		AC 1500V for 1minute
Temperature Coefficient		Maximum 30ppm/°C
Short Time Overload	± [ 0.5%± 0.05Ω]	2.5 X Power rating 5seconds
Load Life	± [ 1.0%± 0.05Ω]	Power rating 1.5 Hours on, 30 minutes off, 500 Hours
Stability	± [ 0.1%± 0.05Ω]	Testing time for 1hour Testing time for 30minutes(0.5m)

## SURFACE TEMPERATURE INCREASE VERSUS POWER LOAD AND DERATING CURVE



## DIMENSIONS[mm]

