



High Power Precision Current Sensing Resistors

High Power Precision Current Sensing Resistors of HPCR4T designed with four terminals, are distinguished by excellent long term stability & TCR. The Kelvin connections of this device allow high precision measurements even with low resistance values. HPCR 4T has a non-inductive copper manganin element inserted into the ceramic case and finally sealed with a cement molding. This resistor has low inductance and has high pulse power. Applications include: Power modules, frequency converters, 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			

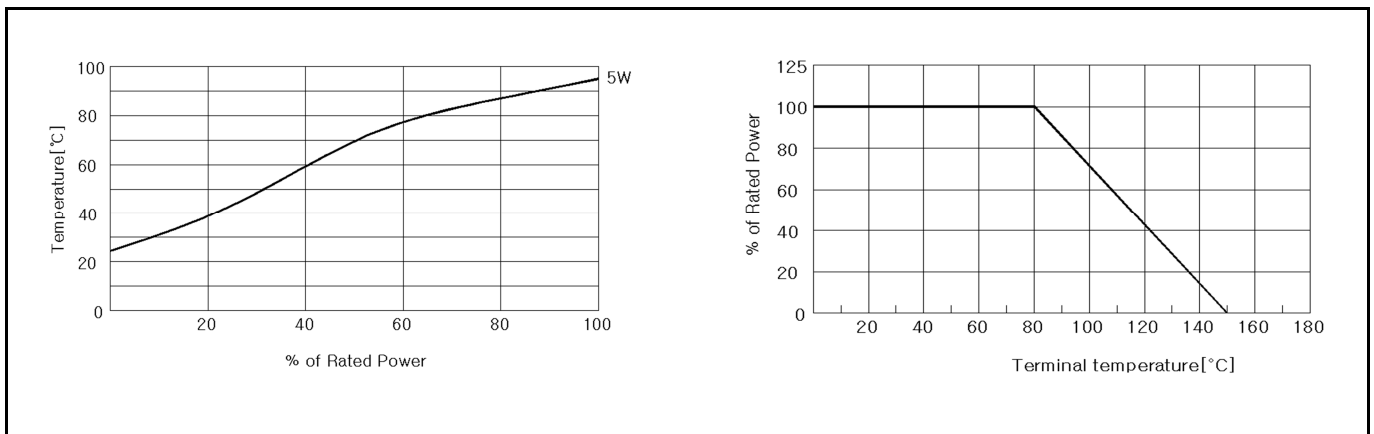
* Max. current 70A at 0.5mΩ

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]

