

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/℃]	Operating Temp. Range
	65	0.5m			
	60	1m			
HPCR-4T	50	2m	±0.5, ±1, ±2	±30ppm/℃	-25℃~+150℃
	40	3m			
	35	**4m			

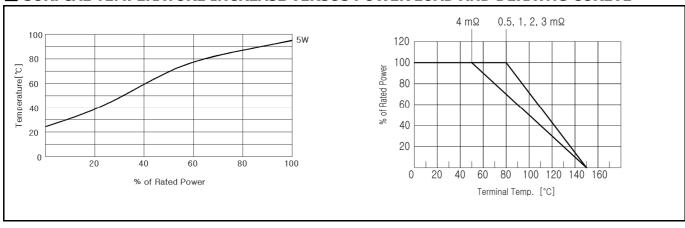
^{*} Max. Current 70A at 0.5mΩ

■ CHARACTERISTICS

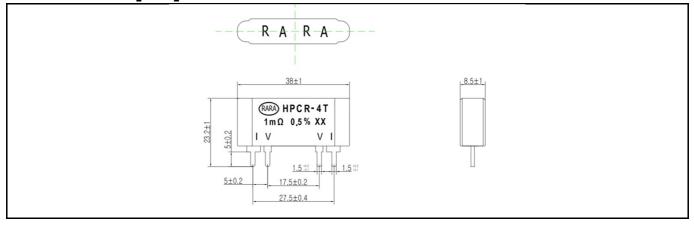
Values in [] mean changed in $\boldsymbol{\Omega}$ after test

Temperature Range		-25℃~+150℃
Insulation Resistance		Min. 20MΩ at DC500V
Dielectric Withstanding Voltage		AC 1500V for 1minute
Temperature Coefficient		Maximum 30ppm/℃
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)

SURFCAE TEMPERATURE INCREASE VERSUS POWER LOAD AND DERATNG CUREVE



■ DIMENSIONS[mm]



Website: http://www.raraohm.com

^{**} Max. Terminal temp. 45 ℃