



TCS8440T Current Sensing Resistors

These components are four-terminal, bus-bar, metal strip current shunts. Assembled using electron beam welding. They also feature excellent long term stability, less than 100ppm/°C TCR. Applications include : Battery charging current control of automotive electronics, current detection in precise power sources, constant current sources, industrial power conversion circuits, HEVs, fuel cells and constant electronic loads.



GENERAL SPECIFICATIONS

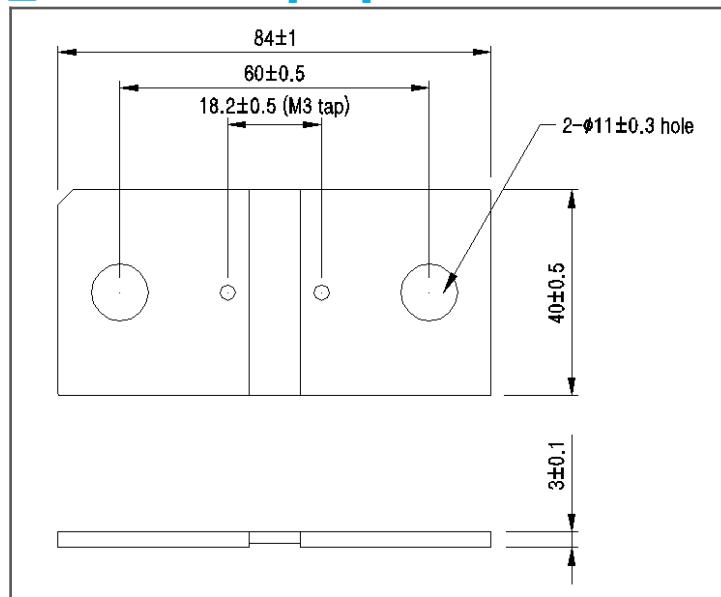
Model	*Power Rating (*At terminal temp.≤140°C)	Resistance	Continuous current (*At terminal temp.≤140°C)	Resistance Tolerance
TCS8440T	Up to 36 [W]	0.05 [mΩ]	840 [A]	J [±5%]

* Referred to power derating curve.

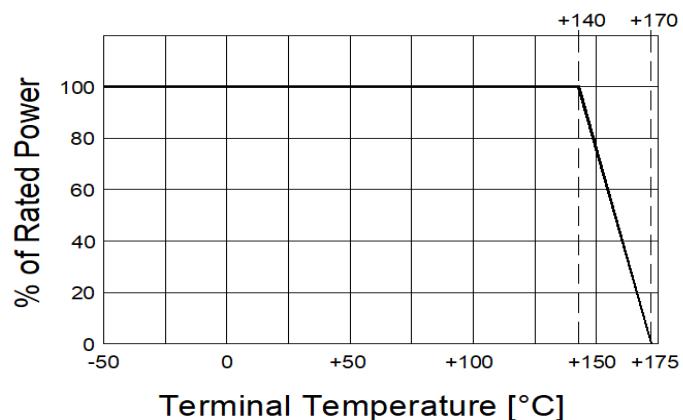
CHARACTERISTICS

Test	Condition
Operating Temperature	-40°C~+170°C
Temperature Coefficient	(+20°C and +60°C) Max.±100ppm/°C
High temperature exposure	△R≤±1.0% +125°C, 1000hrs.
Temperature cycle	△R≤±1.0% -55°C(30min.) to +125°C(30min.) 1000cycles, 1min. Max. transition time.
Resistance to solvent	△R≤±1.0% OKEM Clean or equivalent
Vibration	△R≤±0.5% 10-2000Hz, 5g's for 20min., 12cycles each of 3orientations
Operational Life	△R≤±1.0% Rated power, 1.5hrs "On", 0.5hrs "Off", for 1000hrs. (TA=20°C, Terminal temp.≤70°C)

DIMENSIONS [mm]



DERATING CURVE



ORDERING PROCEDURE EXAMPLE

TCS8536	T	0.05mΩ	J
Model #	Tap type Voltage sensing	Resistance Value	Tolerance