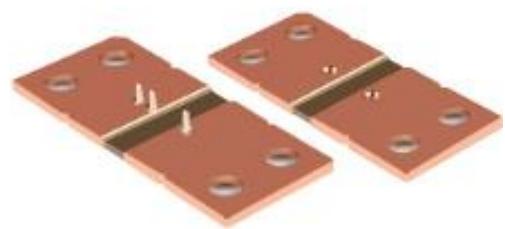


TCS series Current Sensing Resistors

These components are four-terminal, bus-bar, metal strip current shunts. Assembled using electron beam welding. Also they can absorb a high pulse power rating and have very low inductance. They also feature excellent long term stability, less than 100ppm/°C TCR, and have excellent frequency characteristics. 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

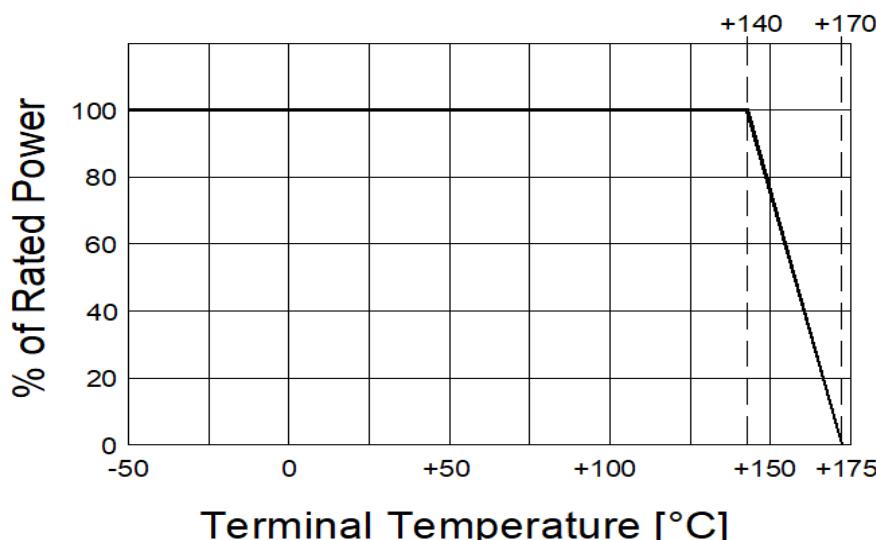
Model	*Power Rating [W] (*At terminal temp.≤140°C)	Resistance [Ω]	Continuous current [A] at 0.025mΩ (*At terminal temp.≤140°C)	Resistance Tolerance
TCS8536	Up to 36	0.025m / 0.05m / 0.1m	1200	J [±5%]

* 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)

DERATING CURVE





■ DIMENSIONS (mm)

Non type voltage sensing (Standard)		Hole(Tap) type voltage sensing		
<p>85±1 60±0.5 4-Φ8.3±0.3 holes 18±0.5 3±0.1 A (Voltage sensing point)</p>		<p>85±1 60±0.5 4-Φ8.3±0.3 holes 18±0.5 3±0.1 B (Φ3.62 holes or M3 taps)</p>		
Pin type voltage sensing		Press Fit type voltage sensing		
<p>85±1 60±0.5 4-Φ8.3±0.3 holes 18±0.5 3±0.1 (5.5)</p>		<p>85±1 60±0.5 4-Φ8.3±0.3 holes 18±0.5 3±0.1 (5)</p>		
<p>C (Copper 0.5t pins : Tin plated)</p>		<p>D (Copper Φ1 pins : Tin plated)</p>		
Model	Resistance [mΩ]	Dimensions [mm]		
		A±0.5	B±0.5	C±0.5
TCS8536	0.025	6	8	4
	0.05	10	12	8
	0.1	18	20	16
		D±0.5		
				20

■ ORDERING PROCEDURE EXAMPLE

TCS8536	H	0.1mΩ	J
Model #	Voltage sensing H : Hole type T : Tap type P : Pin type N : Non type F : Press Fit type	Resistance Value	Tolerance