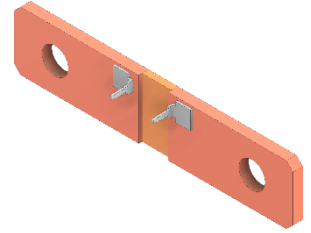


Features:

- Excellent long-term stability
- RoHS compliant, lead free and halogen free
- AEC-Q200 qualified

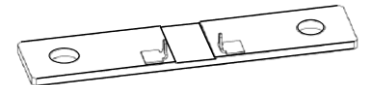
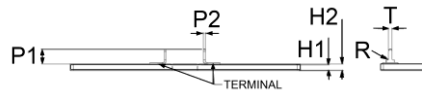
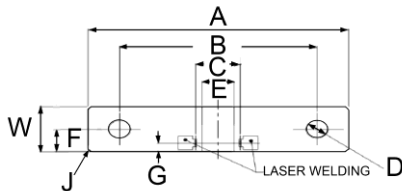


Electrical Specifications

Type / Code	Power Rating (W)	TCR (ppm/°C) ⁽¹⁾	Ohmic Range (Ω) and Tolerance
			5%
HCC8218	35	± 150	0.0001
HCC8420	36	± 225	0.0001
HCC8518	36	± 150	0.0001
HCC7036	40	± 150	0.000025
HCC8236	50	± 150	0.000025, 0.00005

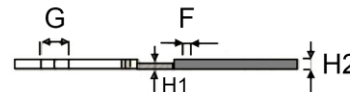
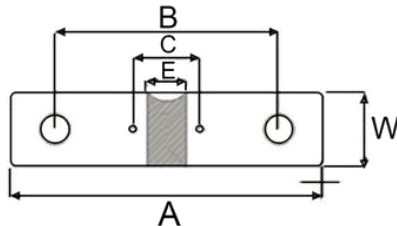
(1) TCR on test point (terminal)

Mechanical Specifications - 8218



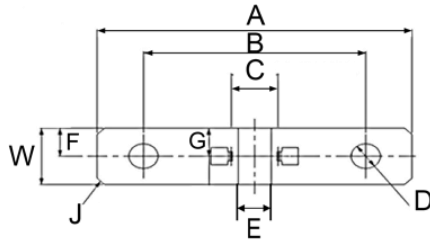
Type/Code	Pins	A	B	C	D	E	F	G	H1	Unit
HCC8218	Yes	3.228 +0/-0.004	2.441 ± 0.004	0.551 ± 0.006	0.276 ± 0.002	0.394	0.354 ± 0.004	0.138 ± 0.006	0.098	inches
		82.00 + 0/-0.10	62.00 ± 0.10	14.00 ± 0.15	7.00 ± 0.05	10.00	9.00 ± 0.10	3.50 ± 0.15	2.50	mm
		H2	J	P1	P2	R	T	W	Unit	
		0.118 ± 0.002	0.039	0.260	0.024 ± 0.002	0.020	0.047 ± 0.002	0.709 +0/-0.004	inches	
		3.00 ± 0.05	1.00	6.60	0.60 ± 0.05	0.50	1.20 ± 0.05	18.00 + 0/-0.10	mm	

Mechanical Specifications - 8420



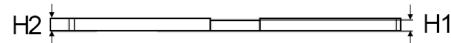
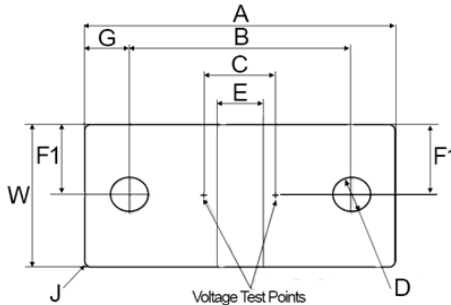
Type/Code	Pins	A	B	C	E	F	Unit
HCC8420	No	3.307 ± 0.008	2.362 ± 0.008	0.709 ± 0.008	0.343 ± 0.008	0.079 ± 0.004	inches
		84.00 ± 0.20	60.00 ± 0.20	18.00 ± 0.20	8.70 ± 0.20	2.00 ± 0.10	mm
		G	H1	H2	W	Unit	
		0.327 ± 0.004	0.079 ± 0.008	0.118 ± 0.008	0.787 ± 0.008	inches	
		8.30 ± 0.10	2.00 ± 0.20	3.00 ± 0.20	20.00 ± 0.20	mm	

Mechanical Specifications - 8518



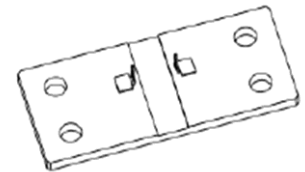
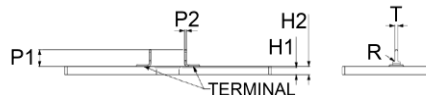
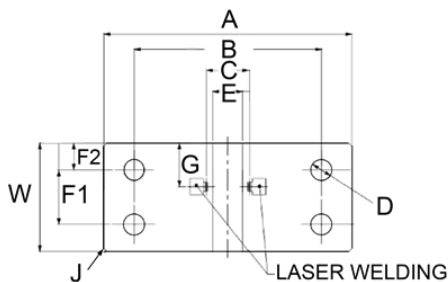
Type/Code	Pins	A	B	C	D	E	F	G	H1	Unit
HCC8518	Yes	3.346 +0/-0.004	2.362 ± 0.004	0.496 ± 0.006	0.315 ± 0.002	0.354	0.354 ± 0.004	0.354 ± 0.004	0.079 ± 0.008	inches
		85.00 + 0/-0.10	60.00 ± 0.10	12.60 ± 0.15	8.00 ± 0.05	9.00	9.00 ± 0.10	9.00 ± 0.10	2.00 ± 0.20	mm
		H2	J	P1	P2	T	R	W	Unit	
		0.118 ± 0.002	0.079 ± 0.008	0.260 ± 0.008	0.024 ± 0.002	0.047 ± 0.002	0.020	0.709 +0/-0.004	inches	
		3.00 ± 0.05	2.00 ± 0.20	6.60 ± 0.20	0.60 ± 0.05	1.20 ± 0.05	0.50	18.00 + 0/-0.10	mm	

Mechanical Specifications - 7036



Type/Code	Pins	A	B	C	D	E	F1	G	H1	Unit
HCC7036	No	2.756 +0/-0.004	1.969 ± 0.004	0.354 ± 0.006	0.335 ± 0.002	0.197 ± 0.008	0.709 ± 0.004	0.394 ± 0.004	0.098 ± 0.002	inches
		70.00 + 0/-0.10	50.00 ± 0.10	9.00 ± 0.15	8.50 ± 0.05	5.00 ± 0.20	18.00 ± 0.10	10.00 ± 0.10	2.50 ± 0.05	mm
		H2	J	W	Unit					
		0.118 ± 0.002	0.039	1.417 +0/-0.004	inches					
		3.00 ± 0.05	1.00	36.00 + 0/-0.10	mm					

Mechanical Specifications - 8236

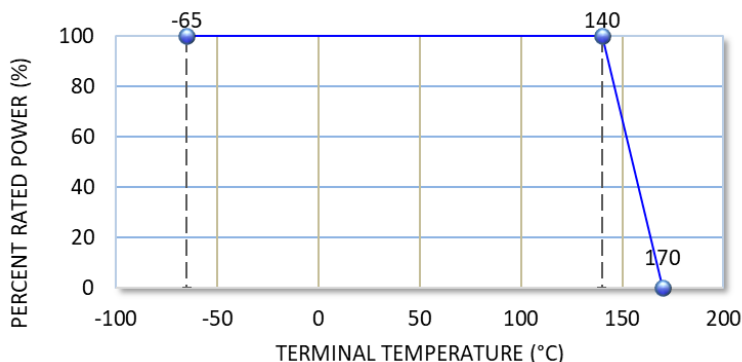


Type/Code	Pins	A	B	C	D	E	F1	F2	G	Unit
HCC8236 0.000025Ω	Yes	3.228 +0/-0.004	2.441 ± 0.004	0.354 ± 0.006	0.276 ± 0.002	0.197	0.709 ± 0.004	0.354 ± 0.004	0.571 ± 0.006	inches
		82.00 + 0/-0.10	62.00 ± 0.10	9.00 ± 0.15	7.00 ± 0.05	5.00	18.00 ± 0.10	9.00 ± 0.10	14.50 ± 0.15	mm
		H1	H2	J	P1	P2	R	T	W	
		0.098	0.118 ± 0.002	0.039	0.260	0.024 ± 0.002	0.020	0.047 ± 0.002	1.417 +0/-0.004	inches
		2.50	3.00 ± 0.05	1.00	6.60	0.60 ± 0.05	0.50	1.20 ± 0.05	36.00 + 0/-0.10	mm

Mechanical Specifications - 8236 (cont.)

Type/Code	Pins	A	B	C	D	E	F1	F2	G	Unit
HCC8236 0.00005Ω	Yes	3.228 +0/-0.004	2.441 ± 0.004	0.551 ± 0.006	0.276 ± 0.002	0.394	0.709 ± 0.004	0.354 ± 0.004	0.571 ± 0.006	inches
		82.00 + 0/-0.10	62.00 ± 0.10	14.00 ± 0.15	7.00 ± 0.05	10.00	18.00 ± 0.10	9.00 ± 0.10	14.50 ± 0.15	mm
		H1	H2	J	P1	P2	R	T	W	Unit
		0.098	0.118 ± 0.002	0.039	0.260	0.024 ± 0.002	0.020	0.047 ± 0.002	1.417 +0/-0.004	inches
		2.50	3.00 ± 0.05	1.00	6.60	0.60 ± 0.05	0.50	1.20 ± 0.05	36.00 + 0/-0.10	mm

Power Derating Curve:



Performance Characteristics

Item	Test Condition	Specification
High Temperature Exposure	Temperature: 170°C; Time: 1000 hours	$\Delta R: \pm 1\%$
Temperature Cycle	Cycle times: 1000 cycles Temperature: -55°C / 155°C Dwell time: 30 minutes Transition times: 1 minute	$\Delta R: \pm 0.5\%$
Biased Humidity	Temperature: 85°C Relative humidity: 85% Time: 1000 hours Current: Rated power x 10%	$\Delta R: \pm 0.5\%$
Low Temperature Exposure	Temperature: -65 ± 2°C; Time: 45 minutes	$\Delta R: \pm 1\%$
Short Time Overload	Power: 5 x rated power Time: 5 seconds	$\Delta R: \pm 1\%$
DC Resistance	Test method: 4 terminal method; Current: 10 A	Within the regulated tolerance
External Visual	Visual inspection	Artificial scratches, discoloration, terminal junction and bending, molding defective product.
Sensing Terminal Junction Strength	Measuring equipment: push-pull gauge Tie-up area: Pin 1/2 point	20 Kg
Mechanical Shock	Power: 100 g; Pulse time: 6 ms; Cycle: 5 times	$\Delta R: \pm 0.5\%$
Vibration	Power: 5 g Frequency: 10 - 2000 Hz Sweep time: 20 minutes Cycle: 12 cycles at 3 axis Vibration direction and wave form: transverse-X, longitudinal-Y, vertical-Z and sine wave	$\Delta R: \pm 0.5\%$
Resistance to Soldering Heat	Solder bath temperature: 260 ± 5°C Dipping time: 10 ± 1 second	$\Delta R: \pm 0.5\%$
Solderability	Solder bath temperature: 245 ± 5°C Dipping time: 5 ± 0.5 seconds	>95% coverage

Note: The surface temperature of component should be below 100°C

Recommended storage conditions is 22 ~ 28°C. Humidity: 40 ~ 75%.

Operating temperature range is -65 to 170°C.

Product use period: It is recommended to use within 2 months of opening the vacuum packaging.

RoHS Compliance

Stackpole Electronics has joined the worldwide effort to reduce the amount of lead in electronic components and to meet the various regulatory requirements now prevalent, such as the European Union's directive regarding "Restrictions on Hazardous Substances" (RoHS 3). As part of this ongoing program, we periodically update this document with the status regarding the availability of our compliant components. All our standard part numbers are compliant to EU Directive 2011/65/EU of the European Parliament as amended by Directive (EU) 2015/863/EU as regards the list of restricted substances.

RoHS Compliance Status					
Standard Product Series	Description	Item	Package / Termination Type	Standard Series RoHS Compliant	Lead-Free Termination Composition
HCC	High Current Chassis Mount Shunt Resistor	Terminal	SMD	YES	100% Copper
		Sizes 8218, 8518, and 8236 Sensing Terminal			Cu (Ag plating/Over 3 µm)

"Conflict Metals" Commitment

We at Stackpole Electronics, Inc. are joined with our industry in opposing the use of metals mined in the "conflict region" of the eastern Democratic Republic of the Congo (DRC) in our products. Recognizing that the supply chain for metals used in the electronics industry is very complex, we work closely with our own suppliers to verify to the extent possible that the materials and products we supply do not contain metals sourced from this conflict region. As such, we are in compliance with the requirements of Dodd-Frank Act regarding Conflict Minerals.

Compliance to "REACH"

We certify that all passive components supplied by Stackpole Electronics, Inc. are SVHC (Substances of Very High Concern) free and compliant with the requirements of EU Directive 1907/2006/EC, "The Registration, Evaluation, Authorization and Restriction of Chemicals", otherwise referred to as REACH. Contact us for complete list of REACH Substance Candidate List.

Environmental Policy

It is the policy of Stackpole Electronics, Inc. (SEI) to protect the environment in all localities in which we operate. We continually strive to improve our effect on the environment. We observe all applicable laws and regulations regarding the protection of our environment and all requests related to the environment to which we have agreed. We are committed to the prevention of all forms of pollution.

How to Order

H	C	C	8	4	2	0	J	B	L	1	0	0
Product Series		Size		Tolerance		Packaging		Resistance Value				
Code	Description	Code	W	Code	Tol	Code	Description	Size	Quantity	Four characters with "L" used as multiplier of 10 ⁻³ for any value under 0.1 ohm		
HCC	High Current Chassis Mount Shunt	8218	35	J	5%	B	Bulk	8218	300			
		8420	36					8420				
		8518	36					8518				
		7036	40					7036	100			
		8236	50					8236				
										0.000025Ω = L025		
										0.00005Ω = L050		
										0.0001Ω = L100		