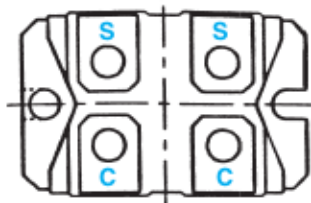


Shunts

PCS – Precision Current Sense Resistors

The PCS series uses EBG's state-of-the-art technology to provide a highly reliable resistor with a Non-Inductive Design. This makes the PCS resistor ideal for many current-monitoring and control applications.

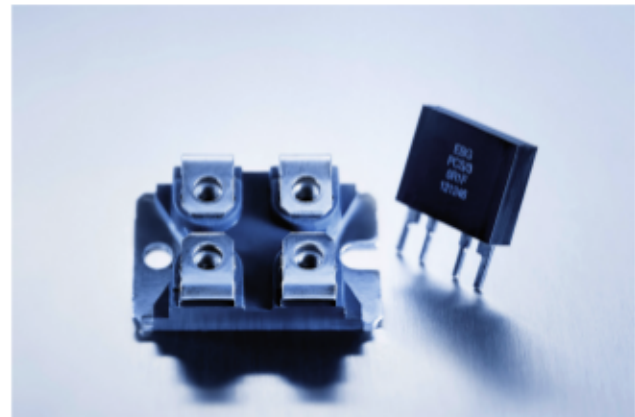
- Available in two different designs
- Values starting at 0.5 mΩ
- Non-Inductive Design
- Four-terminal Kelvin connection
- 100% QC measurement



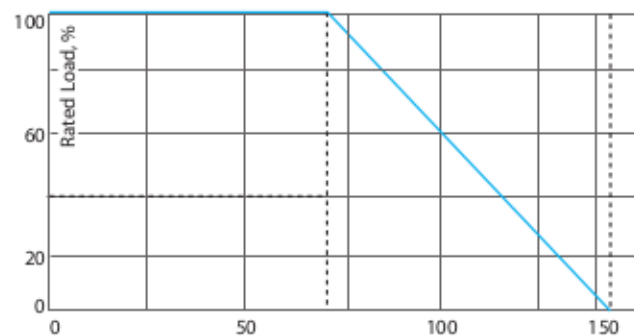
PCS - 100 / PCS - 60

C = current connection (source)
S = voltage connection (sense)

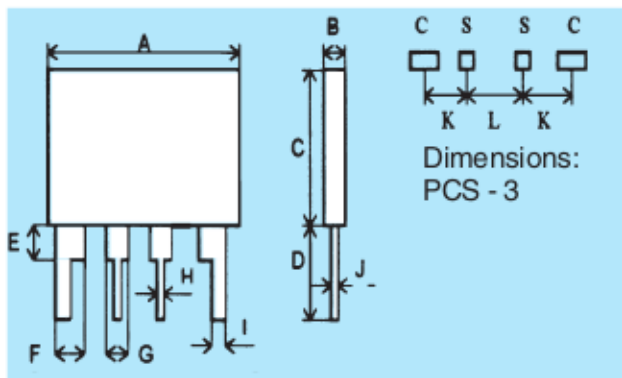
For dimensions, please see our catalog datasheet HXP.



Power Rating Curve (for all types):



Ambient Temperature, °C (PCS-3)
Bottom Case Temperature, °C (PCS-60, PCS-100)



Dimensions:
PCS - 3

PCS - 3

- Standard resistance values: 1 mΩ – 60 mΩ (60 mΩ – 1 Ω upon request)
- Resistance tolerances: 1%, 2%, 5%
- Pulse current up to 200 A / 0.5 sec, depending on ohmic value
- Temperature coefficient: 60 ppm/°C typically, TC referenced to 25°C, ΔR taken at –15°C and +105°C; for values >60 mΩ Please ask for details!
- Power rating: 3 W at 70°C 40 A permanent (higher upon request)
- Load life: 1,000 hours at rated power at +70°C, DR 0.2% max.
- Thermal shock: Mil-Std-202, Method 107, Cond. A, DR 0.2% max.
- Moisture resistance: Mil-Std-202, Method 106, DR 0.2% max.
- Terminal material: Kelvin Terminals; tinned copper
- Encapsulation: polyester over resistance element
- Operating Temperature: –55°C to +150°C
- Storage Temperature: –40°C to +85°C

PCS - 100

- Standard resistance values: 0.5 mΩ–1 Ω (others upon request)
- Resistance tolerances: 1%, 2%, 5%
- Pulse current up to 500 A/0.5 sec, depending on ohmic value
- Temperature coefficient: TC referenced to 25°C, ΔR taken at 15°C and +105°C, <60 ppm/°C (TC <500 ppm/°C for resistance range from 27 mΩ to 49 mΩ)
- Power rating: 100 W [at 70°C case temperature) 50 A permanent (higher upon request)
- Dielectric strength: 1,000 V DC higher value upon request
- Heat resistance: Rth = <0.56°K/W
- Protection class acc. to IEC 950/CSA22.2 950/M – 89 and EN 60950.88:2
- Operating temperature: –55°C to +150°C
- Storage temperature: –40°C to +85°C
- Mounting - max. torque for contacts: 1.3 Nm 8 (static)
- Mounting - max. torque for base plate: 1.5 Nm (static)

PCS - 60

This resistor equals PCS-100 except:

- Power rating: 60 W (at 70°C case temperature)
- Dielectric strength: up to 4,000 V DC or 2,800 V AC, higher values upon request
- Temperature coefficient: TC referenced to 25°C, ΔR taken at –15°C and +105°C, <60 ppm/°C (TC <500 ppm/°C for resistance range from 20 mΩ to 49 mΩ)
- Operating temperature: –55°C to +150°C
- Storage temperature: –40°C to +85°C

PCS - 3

Dim.	Millimeter	Indies
A	20.5 ± 1.20	(0.807 ± 0.008)
B	5.35 ± 0.10	(0.211 ± 0.004)
C	16.4 ± 0.20	(0.646 ± 0.008)
D	8.00 ± 0.20	(0.315 ± 0.008)
E	3.00 ± 0.20	(0.118 ± 0.008)
F	3.00	(0.118)
G	2.00	(0.079)
H	1.10	(0.043)
I	1.50	(0.059)
J	0.80	(0.031)
K	5.08	(0.2)
L	7.62	(0.3)