

**NEW!**

## Precision Foil Current Sense Resistors

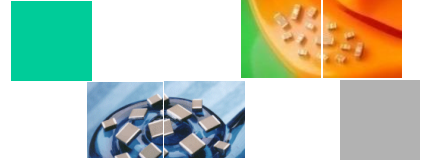
***The new S-Series combine Low TCR down to  $\pm 2$  ppm/ $^{\circ}$ C with High Power Ratings to 80 W.***

Vishay Foil resistor Group (VPG) announced that its Powertron resistor brand has introduced the first seven devices in its S Series of precision foil current sense resistors. Offering a TCR of  $\pm 2$  ppm/ $^{\circ}$ C — the industry's lowest for high-power current shunts — the SHR, SHS, SNR, and SPR devices provide power ratings to 80 W in a variety of epoxy packages.

The resistors released today offer a wide range of power ratings — from 1.5 W in free air to 80 W when mounted on a heatsink — with low resistance values from 0.002  $\Omega$  to 50  $\Omega$  and tight tolerances to  $\pm 0.1\%$ . The devices feature maximum currents to 150 A — with higher values available upon request — very low inductance, thermal EMF of  $< 1$   $\mu$ V/ $^{\circ}$ C, and a temperature range of  $-40$   $^{\circ}$ C to  $+130$   $^{\circ}$ C.



Providing exceptional load-life stability of  $\pm 0.1\%$  typical after rated power at  $70^{\circ}$ C for 2,000 hours, S Series resistors provide highly accurate and reliable current sensing in power supplies, digital multimeters, current control systems, medical equipment, solar and wind inverters, AC/DC converters, and battery chargers. The RoHS-compliant devices are available in a wide range of package sizes — including the standard TO-220 and surface-mount version.



## About Vishay Precision Group (VPG)

VPG is an internationally recognized designer, manufacturer and marketer of components based on its resistive foil technology; sensors; and sensor-based systems specializing in the growing markets of stress, force, weight, pressure, and current measurements. VPG is a market leader of Foil Technology Products, providing ongoing technology innovations in precision foil resistors and foil strain gages, which are the foundation of the company's Force Sensors Products and its Weighing and Control Systems.

The product portfolio consists of a variety of well-established brand names recognized for precision and quality in the marketplace.

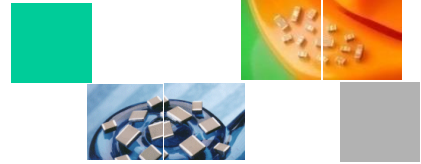


## About Powertron

Powertron is a brand of VPG Foil Resistors, which produces the most precise and stable resistors available. Powertron develops, manufactures and markets high-precision foil, current sense, and thick film resistors for use in diverse applications and offers a full complement of resistors for accurate, precise, and high-power circuits, with customization capabilities supporting virtually any package type.

Powertron focuses on delivering solutions with the best combination of power ratings, TCR, and resistance ranges with foil resistor products that include devices built on CuNiMn Bulk Metal® Foil for low-ohm, high-precision applications, and NiCr foil for even higher levels of stability.

A thick film product line is also available in a wide range of packages.

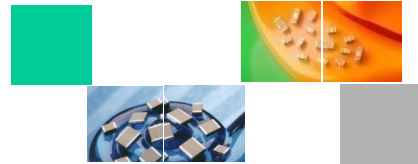


## Powertron Cross-Reference Tables

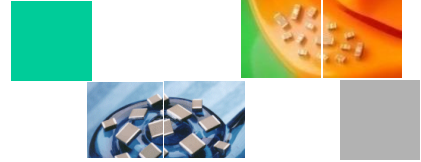
Powertron GmbH, a brand of Vishay Precision Group, develops, manufactures, and markets high-precision foil, current sense, and thick film resistors for a wide range of applications. Powertron precision foil resistors can be used as drop-in replacements for the **Isabellenhuetten** leaded resistors as well as **Caddock** and **EBG** thick film resistors listed in the cross-reference table below.

### EBG Thick Film Resistors – Powertron Cross Reference Table

<b>EBG Part Number</b>	<b>Powertron Part Number</b>
GXP120	<a href="#"><u>KHN 2-T227</u></a>
HXP200	<a href="#"><u>KHR 2-T227</u></a>
LXP18	<a href="#"><u>NPR 2-T221</u></a>
LXP20	<a href="#"><u>NPR 2-T221</u></a>
MXP35	<a href="#"><u>NHR 2-T220</u></a>
PCS -1	<a href="#"><u>FPR 4-T220</u></a>
PCS -3	<a href="#"><u>FHR 4-2321</u></a>
PCS-100	<a href="#"><u>FPR 4-T227</u></a>



<b>Isabellenhütte Part Number</b>	<b>Powertron Part Number</b>
A-H1	<a href="#">FHR 4-4618</a>
A-H2	<a href="#">FHR 4-3825</a>
A-N	<a href="#">FPR 4-3316</a>
C-H1	<a href="#">FHR 2-3818</a>
C-H2	<a href="#">FHR 2-3025</a>
C-N	<a href="#">FPR 2-2614</a>
PLC	<a href="#">FPR 2-2614</a>
D	<a href="#">FPR 2-1617</a>
E	<a href="#">FPR 2-1623</a>
IWN3	<a href="#">FPN 3-4916</a>
IWN3-H1	<a href="#">FHN 3-6819</a>
IWN3-H2	<a href="#">FHN 3-5426</a>
IWN4	<a href="#">FPN 4-5716</a>
IWN4-H1	<a href="#">FHN 4-7819</a>
IWN4-H2	<a href="#">FHN 4-6426</a>
IWN5	<a href="#">FPN 5-4818</a>
IWN7	<a href="#">FPN 7-6516</a>
PBH	<a href="#">FPR 2-T218</a>
PBV	<a href="#">FHR 4-2321</a>
PBW	<a href="#">SHR 4-2820</a>
PSB	<a href="#">FPR 2-T221</a>
RTO-A	<a href="#">FPR 2-T227</a>
RTO-B	<a href="#">FPR 4-T227</a>



## Caddock Thick Film Resistors – Powertron Cross Reference Table

Caddock Part Number	Powertron Part Number
MP725	<a href="#">NPS 2-T126</a>
MP816	<a href="#">NPR 2-T221</a>
MP820	<a href="#">NPR 2-T220</a>
MP821	<a href="#">NPR 2-T220</a>
MP850	<a href="#">NHR 2-T220</a>
MP9100	<a href="#">KHR 2-T218</a>
MP916	<a href="#">NPR 2-T221</a>
MP925	<a href="#">NPR 2-T221</a>
MP930	<a href="#">NPR 2-T221</a>
MP2060	<a href="#">NHR 2-T221</a>

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### **Impressum**

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