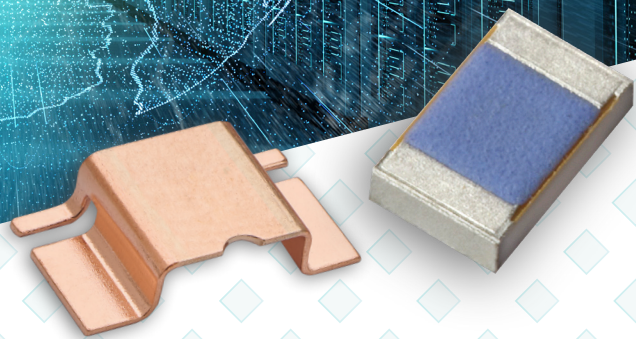


**VPG** Foil Resistors

VFR • ALPHA ELEC. • POWERTRON • APR

**Consistent Precision  
& Reliability**



**APR**  
A VPG Brand

**Precision Resistors**

**Made-to-Stock - High Performance - Short Delivery**

# The new platform of precision resistors

Made-to-Stock - High Performance - Short Delivery



Our new APR product line responds to market demands of trending applications like 5G or EV Charging equipment to provide off-the-shelf, A+ class, surface mount resistors in tape & reel packaging and power current-sense resistors with resistance values based on E24 & E96 codes complying with the AEC-Q200 qualification.

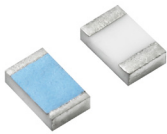
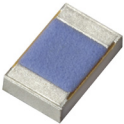

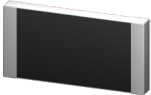


### When better is good enough

With an increased level of APR components are the preferred choice for applications that are demanding, but not in need of utmost component performance. Building on decades of expertise in resistor manufacturing, we utilize the technology that meets the objective: metal strip, thin film, thick film, metal foil.

For higher performances, tighter specifications up to EEE/QPL levels, or any customization requirements, our customers can rely on our AA and AAA product lines. VPG Foil Resistors is your one-stop-shop for precision resistors. Contact us at [foil@vpgsensors.com](mailto:foil@vpgsensors.com)





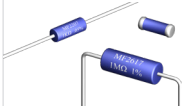


## SMD Resistors

Product	Model	Configuration	Resistance Range	Best Tolerance	TCR (-55°C to +125°C, +25°C ref.) Typical	Rated Power at +70°C	Load Life Stability 2000 Hours, +70°C Under Power-Typical
	<b>VSMX Series</b>	Wraparound Foil Resistor <b>Sizes:</b> 0603, 0805, 1206, 1506, 2010, 2512	10 Ω to 125 kΩ	±0.01%	±3 ppm/°C	to 0.4 W	±0.01%
	<b>RWX Series</b>	Wraparound Foil Resistor, <b>Sizes:</b> 0603, 0805, 1206	30 Ω to 30 kΩ	±0.01%	to ±5 ppm/°C	to 0.3 W	±0.005%
	<b>S SL Series</b>	Molded, flexible termination construction Resistors, Wirewound (S Series), Metal Strip (SL Series)	5 mΩ to 50 kΩ	±0.01%	to ±20 ppm/°C	to 4 W	±1%
	<b>CHM Series</b>	Wraparound Thick Film Resistor, <b>Sizes:</b> 0805, 1206, 1210, 2010, 2512, 4020	100 kΩ to 10 TΩ	±0.25%	to ±25 ppm/°C	to 1.5 W	to ±0.25% (1000 hrs)
	<b>CMF Series</b>	Wraparound Thin Film Resistor, <b>Sizes:</b> 0603, 0805, 1206, 2512	5.1 Ω to 15 MΩ	±0.05%	to ±5 ppm/°C (+25°C to +85°C)	to 0.75 W	to ±0.1% (1000 hrs)
	<b>CRS Series</b>	Wraparound Thick Film Resistor, <b>Sizes:</b> 0402, 0603, 0805, 1206	0.1Ω to 500MΩ	±0.5%	to ±50 ppm/°C (+25°C to +125°C)	to 0.25W	to ±0.5% (1000 hrs)







For more information regarding our products please contact [foil@VPGsensors.com](mailto:foil@VPGsensors.com)

## Leaded Resistors

Product	Model	Configuration	Resistance Range	Best Tolerance	TCR (-55°C to +125°C, +25°C ref.) Typical	Rated Power at +70°C	Load Life Stability 2000 Hours, +70°C Under Power-Typical
	<b>100 SM PC Series</b>	Axial and radial leads molded wirewound resistors	10 Ω to 6 MΩ	0.005%	to ±2 ppm/°C	to 2 W	±0.01%
	<b>HTE Series</b>	Axial leads conformal high voltage thick film coated resistors	1 kΩ to 700 MΩ	0.5%	±100 ppm/°C	to 15 W	±0.7%
	<b>UT Series</b>	Axial leads molded wirewound resistors	0.02 Ω to 320 kΩ	0.01%	to ±20 ppm/°C	to 15 W	to ±1%
	<b>GST Series</b>	Power thick film molded resistors	1 MΩ to 1 TΩ	0.5%	to ±25 ppm/°C (+25°C to +85°C)	to 2 W	to ±0.5% (1000 hrs)
	<b>MF2000 Series</b>	Axial leads or MELF configuration, thin film molded resistors	1 Ω to 100 MΩ	0.05%	to ±25 ppm/°C	to 0.65 W	±0.5% (1000 hrs)

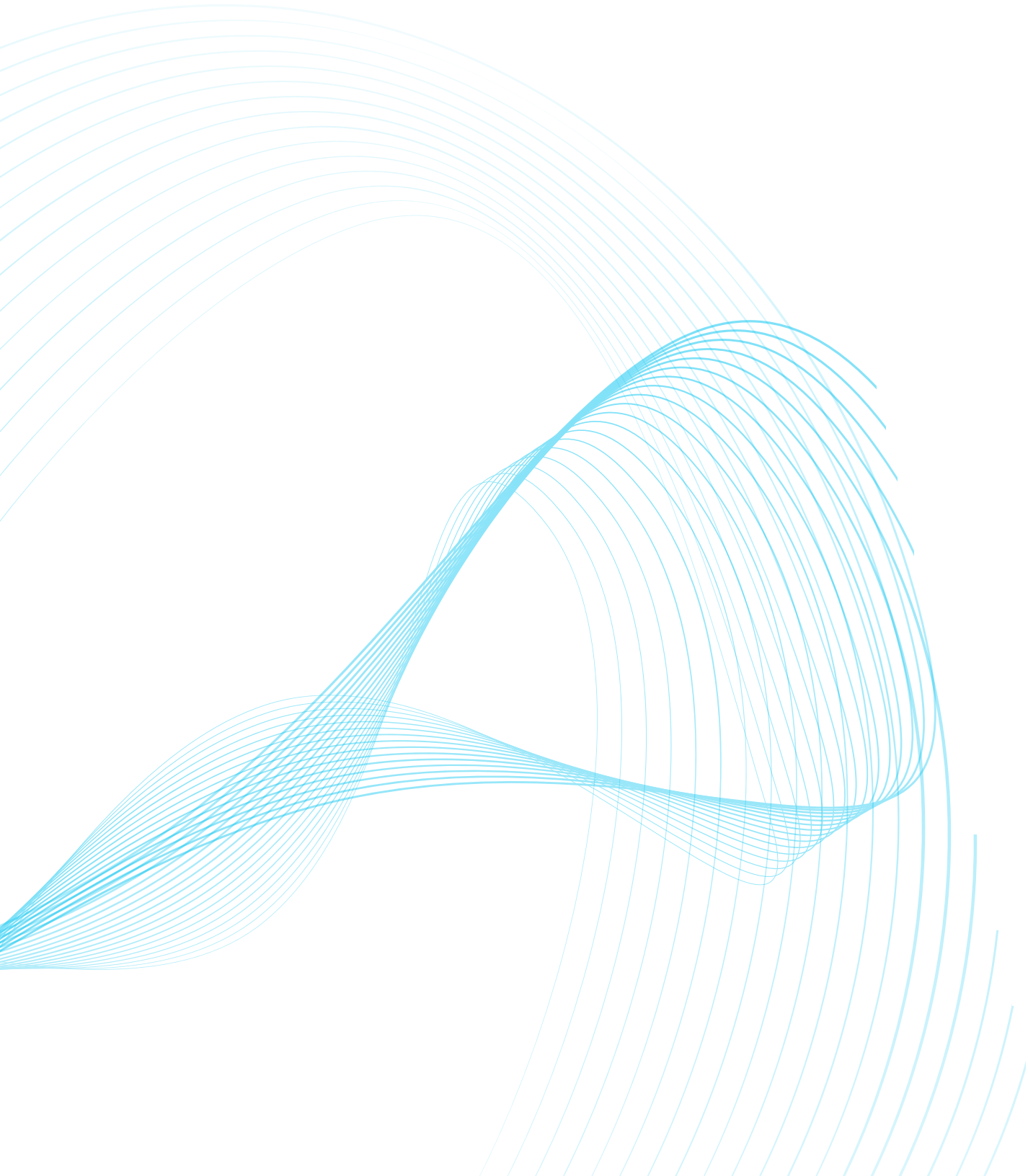
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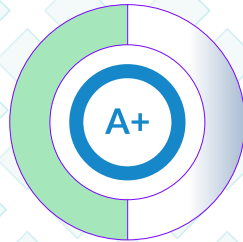
## Current Sense Resistors

Product	Model	Configuration	Resistance Range	Best Tolerance	TCR (-55°C to +125°C, +25°C ref.) Typical	Rated Power at +70°C	Load Life Stability 2000 Hours, +70°C Under Power-Typical
	<b>CSM3637L</b>	Metal Strip current sense SMD resistor	2 mΩ to 100 mΩ	±0.1%	to ±25 ppm/°C	to 3 W	±0.2%
	<b>CSM2512L</b>	Metal Strip current sense SMD resistor	5 mΩ to 200 mΩ	±0.1%	to ±25 ppm/°C	to 1 W	±0.2%
	<b>MSR Series</b>	Bare Metal Element Current Sense through-hole Resistors	5 mΩ to 100 mΩ	±1%	±20 ppm/°C	to 5 W	-
	<b>CSM2512A</b>	Metal Strip current sense SMD resistor	0.2 mΩ - 5 mΩ	±1%	to ±25 ppm/°C	to 6 W	±0.5%
	<b>CSM2726P</b>	Metal Strip current sense SMD resistor	0.2 mΩ - 5 mΩ	±0.5%	to ±20 ppm/°C	to 12 W	±0.5%
	<b>CSM2817</b>	Metal Strip current sense SMD resistor	1 mΩ to 100 mΩ	±0.1%	to ±15 ppm/°C	5 W	±0.5%
	<b>CSM3920A</b>	Metal Strip current sense SMD resistor	0.2 mΩ - 5 mΩ	±1%	to ±25 ppm/°C	to 12 W	±0.5%
	<b>CSM4026P</b>	Metal Strip current sense SMD resistor	0.2 mΩ - 5 mΩ	±0.5%	to ±20 ppm/°C	to 12 W	±0.5%
	<b>CSM5930A</b>	Metal Strip current sense SMD resistor	0.1 mΩ - 3 mΩ	±1%	to ±25 ppm/°C	to 15 W	±0.5%

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## Notes





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