

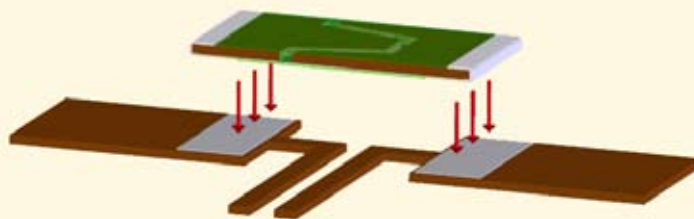
VMx – Keeping ahead

VMS (2512), VMP (2010), VMK (1206), VMI (0805)

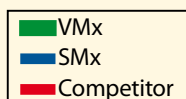
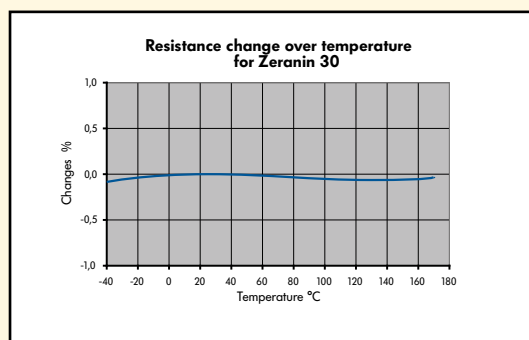
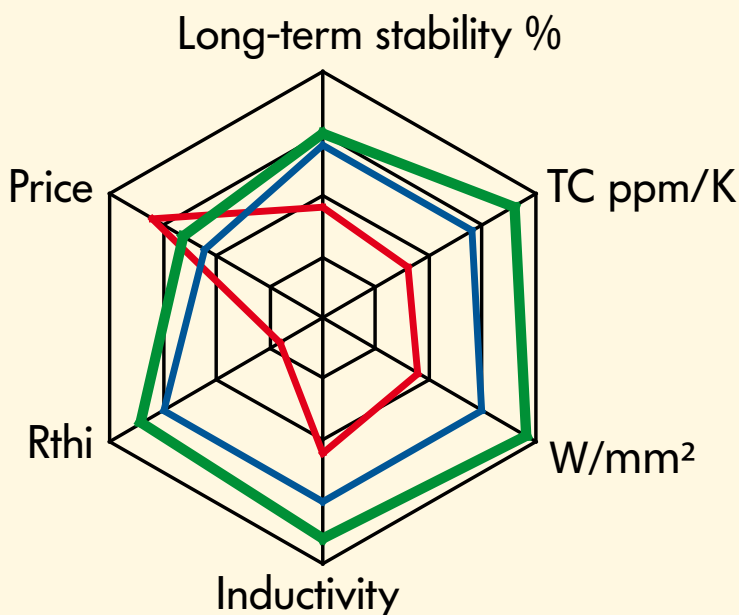
The VMx series combines the excellent features of the SMx and LMx series.

Product benefits

- 3 W power dissipation with size 2512
- Internal thermal resistance < 20 K/W
- TCR < 20 ppm/K
- Low thickness
- Small size, starting at 0805
- High nominal and pulse power
- Standard pad sizes
- Solder junction visible for AOI (automatic optical inspection)



Comparison with strongest competitor



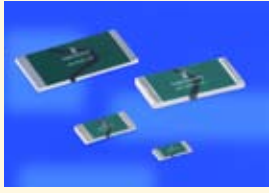
From inside to outside:

- poor
- fair
- good
- excellent

The VMx series is suitable for the following applications

- Sensing resistors for power hybrid modules
- Control units in automotive engineering
- Power modules
- Frequency converters
- Switching power supply

VMx – Keeping ahead

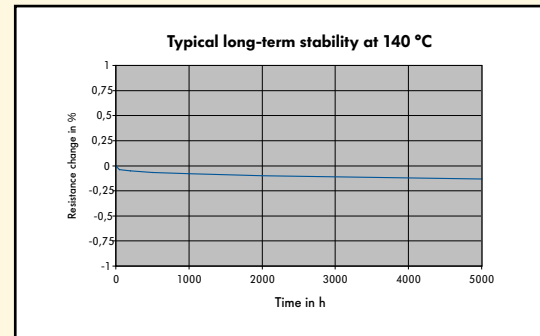


Scale 2.5:1

Type	VMS	VMP	VMK	VMI
Size	2512	2010	1206	0805
Power dissipation	3 W	2 W	1 W	0.5 W
Tolerance	0.5, 1 and 5 %	1, 5 %	1, 5 %	5 %
TC (20° C to 60 °C)	< 20 ppm/K	< 20 ppm/K	< 20 ppm/K	< 20 ppm/K
Cont. current	25 A	20 A	10 A	7 A
Pulse energy	up to 0.2 J	up to 0.2 J	up to 0.1 J	up to 0.05 J
Rthi	< 20 K/W	< 30 K/W	< 60 K/W	< 80 K/W
Resistance range	5 mΩ - 2 Ω	5 mΩ - 1 Ω	10 mΩ - 500 mΩ	10 mΩ - 200 mΩ

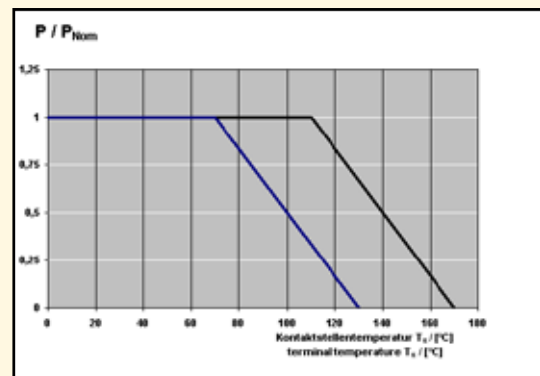
Resistance material Zeranin®

- Negligible low thermal EMF versus copper, below 1 μV/K
- Good long-term stability (below 0.3 % under nominal power)
- Nearly independent of ambient temperature in the application range from -40 to +170 °C (low TCR values)



Benefits and features

- Tin/copper plated terminals
- Reflow, infrared or wave soldering
- Extremely low internal heat resistance
- High nominal and pulse power
- Standard tape and reel packaging



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