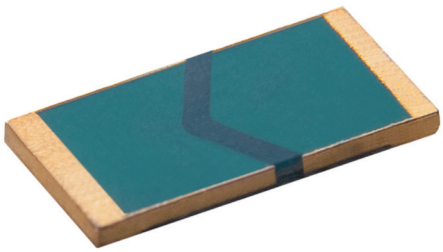
ISABELLENHÜTTE
Innovation by Tradition

VMP-A // Au-plated
Size 2010



Features

- Au-plated terminals
- 2 W permanent power at 110 °C
- Constant current up to 4.5 A (100 mOhm)
- Small size (2010)
- High pulse power rating
- Excellent long-term stability
- Mounting: conductive adhesive / soldering
- RoHS 2011/65/EU compliant

RoHS

Applications

- Current sensor for power hybrid applications
- Control systems for the automotive market
- Power modules
- Frequency converters
- Switch mode power supplies

Technical data

Resistance values	**mOhm**	100 / 200
Tolerance	**%**	1 / 5
Temperature coefficient (20-60 °C)	**ppm/K**	<20
Applicable temperature range	**°C**	-55 to +170
Power rating	**W**	2
Internal heat resistance (R_{thi})	**K/W**	<30
Dielectric withstanding voltage	**V AC/DC**	200
Inductance	**nH**	<2
Stability (Nominal load) deviation after 2000h, T_K = Terminal temperature		<0.5 % (T_K=80 °C) <1.0 % (T_K=110 °C)

Ordering code

VMP - R100 - 5.0 - A

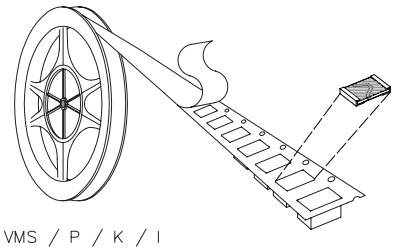
- A ..... Au-plated
- 5.0 ..... Tolerance
- R100 ..... Resistance value [Ohm] / „R" represents decimal point
- VMP ..... Type

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VMP-A // Size 2010

Tape and reel information

Specification		DIN EN 60286-3
Tape width	**mm**	12
Reel size	**inch**	13
Parts per reel	**pcs**	12500
Packaging weight	**g**	481



VMS / P / K / I

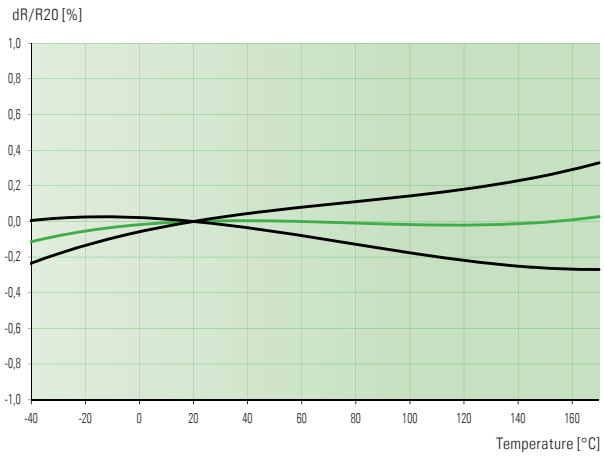
Specification (*parts tested at soldered condition)

Parameters	**Test conditions**	**Specified values***
Temperature Cycling	1000 cycles (-55 °C to +150 °C)	±0.5 %
Low Temperature Storage and Operation	-65 °C for 24 h	±0.2 %
Resistance to Soldering Heat	MIL-STD-202 method 210	±0.1 %
Moisture Resistance	MIL-STD-202 method 106	±0.5 %
Mechanical Shock	100 g, 6 ms, 5 pulse	±0.1 %
Vibration, High Frequency	10 Hz - 2000 Hz	±0.2 %
Operational Life	2000 h, TK max at nominal load	±1.0 %
High Temperature Exposure	2000 h / 170 °C	±1.0 %
Bias Humidity	+85 °C, 85 r.F., 10 % Bias	±0.7 %

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VMP-A // Size 2010

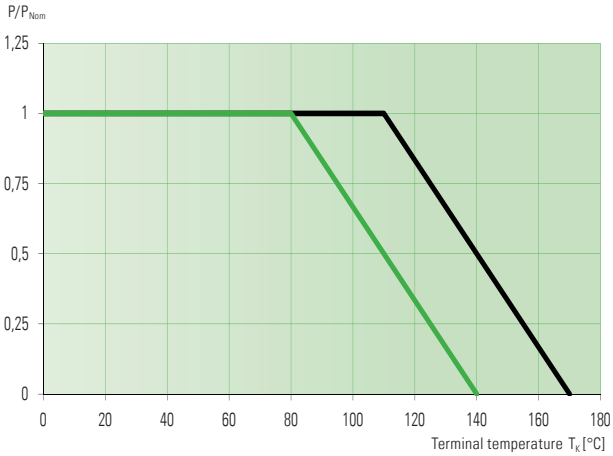
Temperature dependence of the electrical resistance



Limiting curve

Typical temperature dependence of a VMP-A resistor

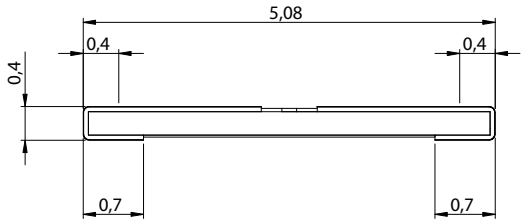
Power derating curve

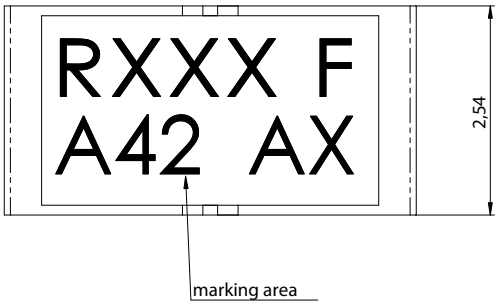


Stability < 1.0 %

Improved stability < 0.5 %

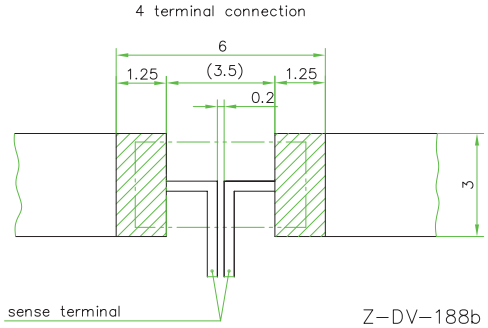
Mechanical dimensions [mm]





Z-DA-290b

Pcb-layout proposal (Reflow-soldering) [mm]

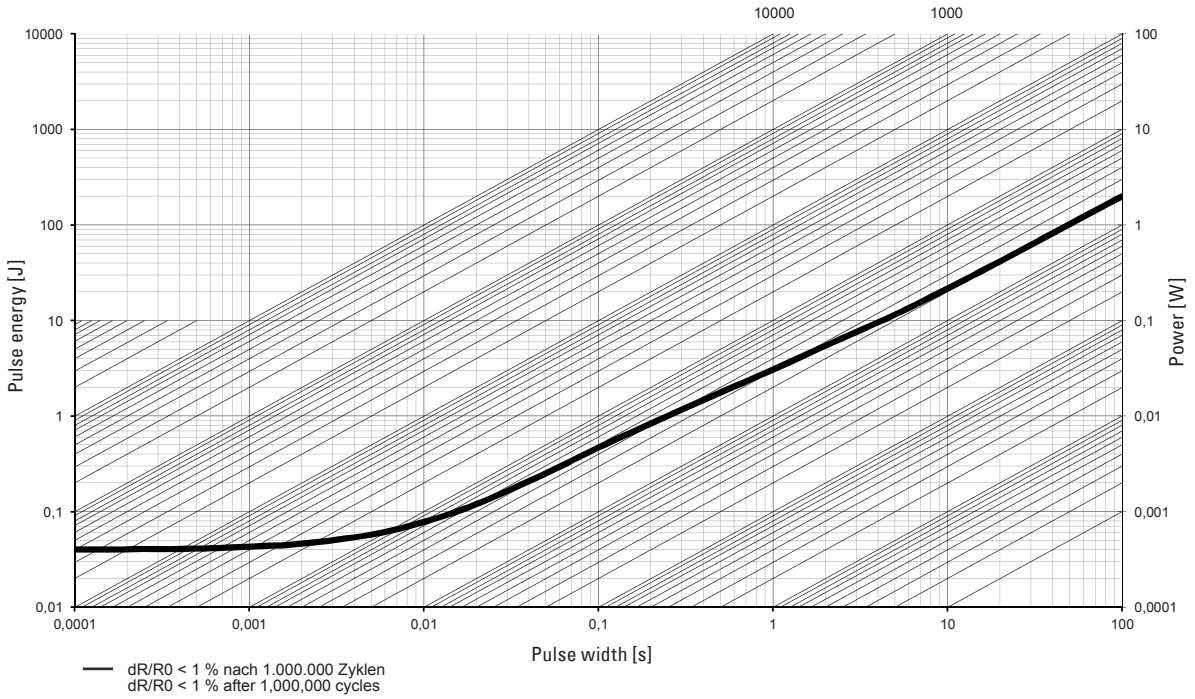


Z-DV-188b

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VMP-A // Size 2010

Maximum pulse energy respectively pulse power for permanent operation



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