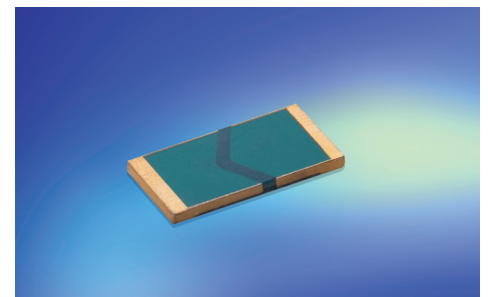


ISA-PLAN® - SMD Präzisionswiderstände / SMD precision resistors

TECHNISCHE DATEN / TECHNICAL DATA		
Widerstandswerte	Resistance values	25, 80, 100, 180, 200, 250 mOhm
Toleranz	Tolerance	1 %, 5 %
Temperaturkoeffizient	Temperature coefficient	< 20 ppm/K (20 °C - 60 °C)
Temperaturbereich	Applicable temperature range	-55 °C bis/to +170 °C
Belastbarkeit	Load capacity	2 W
Innerer Wärmewiderstand (R_{thi})	Internal heat resistance (R_{thi})	< 30 K/W
Isolationsspannung	Dielectric withstanding voltage	200 V AC/DC
Induktivität ($R < 20$ m Ohm)	Inductance	< 2 nH
Stabilität (Nennlast) Abweichung $T_K =$ Kontaktstellentemperatur		< 0.5 % nach/after 2000 h ($T_K = 80$ °C)
Stability (Nominal load) deviation $T_K =$ Terminal temperature		< 0.7 % nach/after 2000 h ($T_K = 110$ °C)

MERKMALE / FEATURES

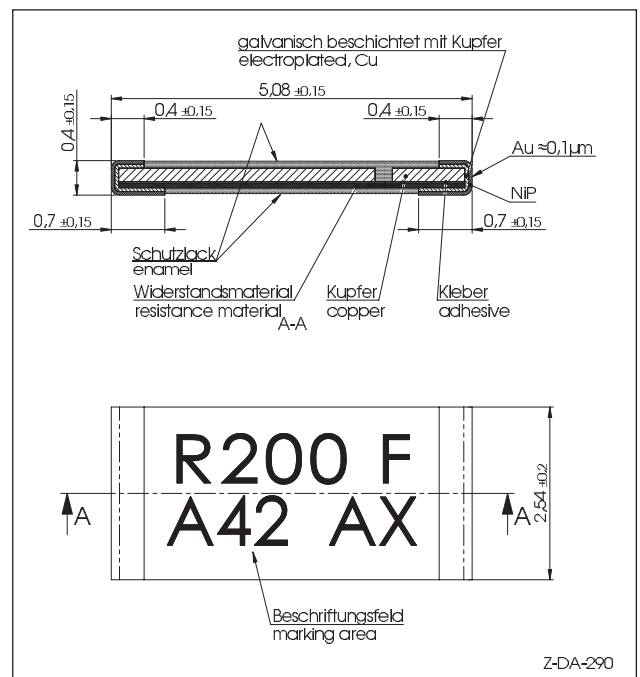
- Vergoldete Kontakte
Au-plated terminals
- 2 Watt Dauerleistung bei 110 °C
2 Watt permanent power at 110 °C
- Dauerströme bis 10 A (25 mOhm)
Constant current up to 10 A (25 mOhm)
- Kleine Baugröße (2010)
Small size (2010)
- Sehr hohe Pulsbelastbarkeit
High pulse power rating
- Sehr gute Langzeitstabilität
Excellent long term stability
- Bauteilemontage: Leitkleben
Mounting: conductive adhesive



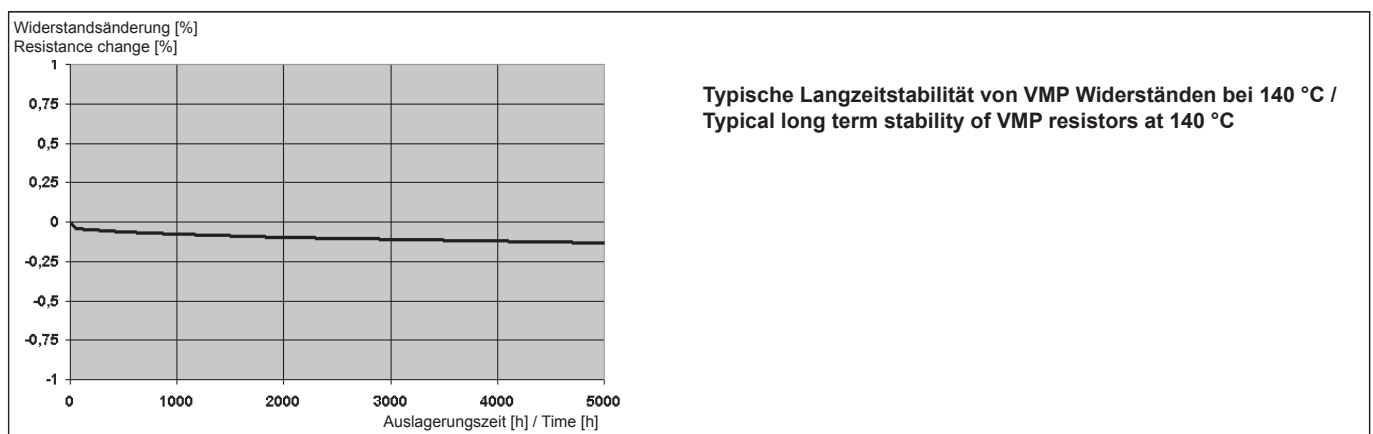
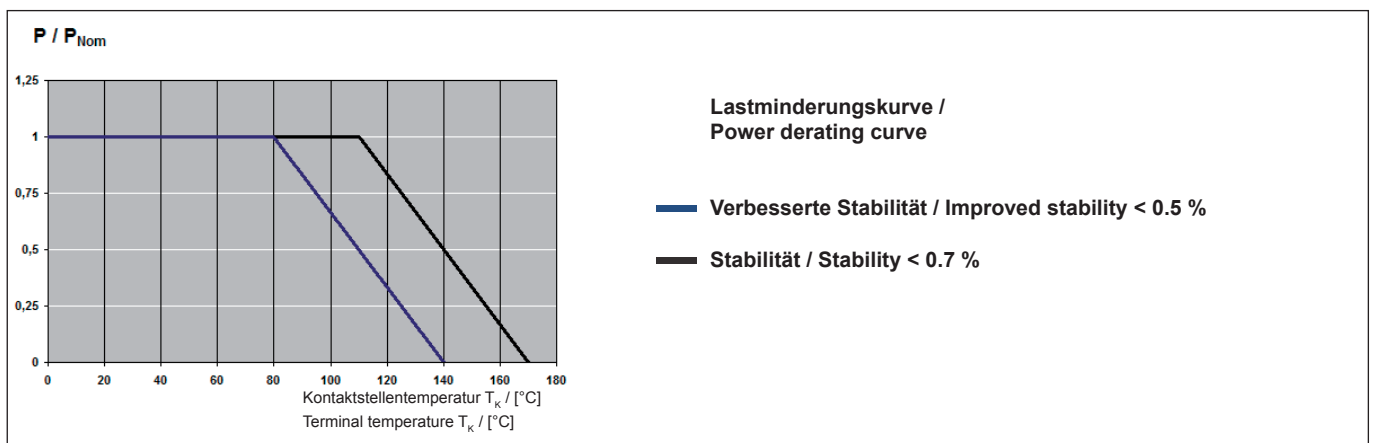
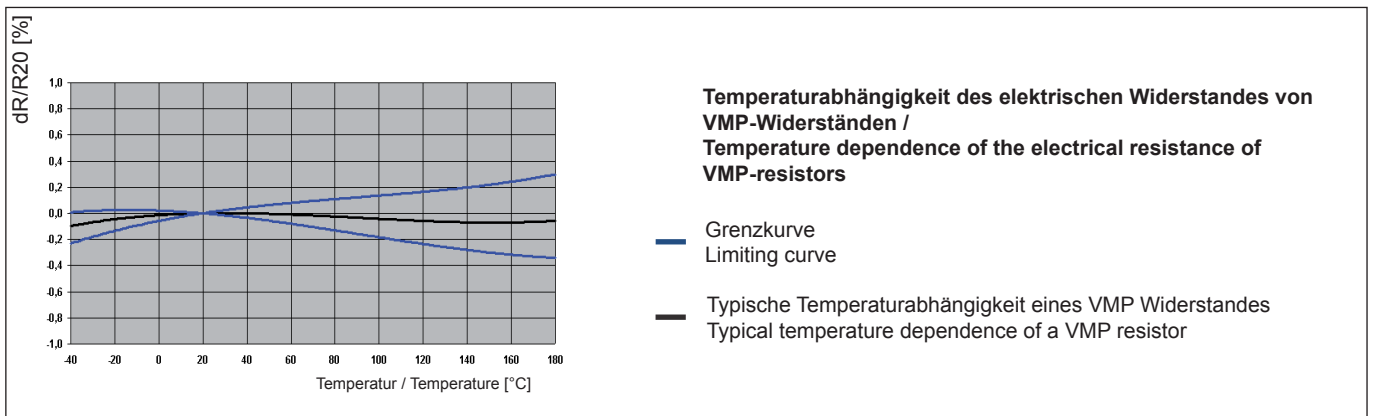
Bauform / Size 2010

APPLIKATIONEN / APPLICATION

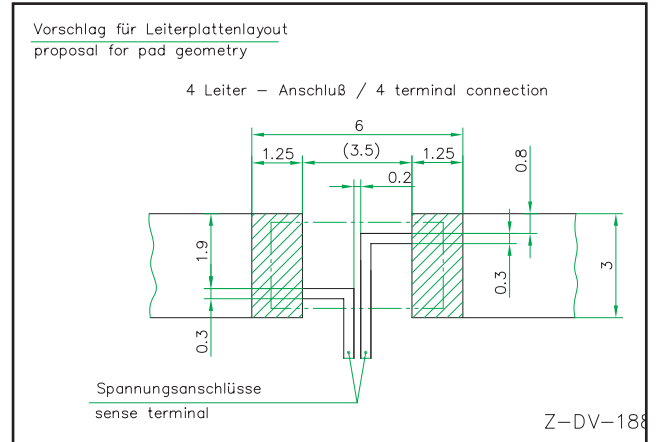
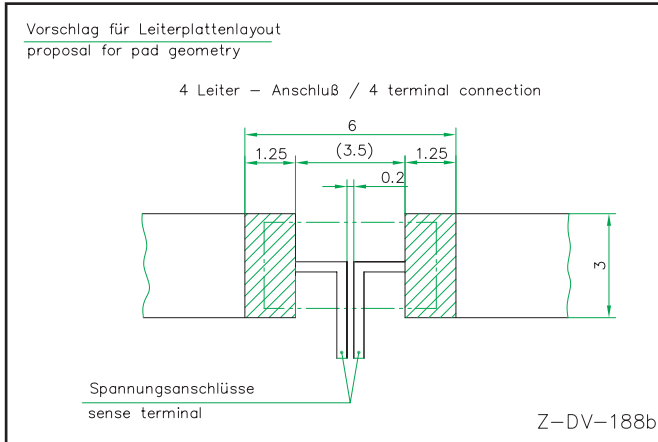
- Messwiderstand für Leistungshybride
Current sensor for power hybrid applications
- Steuergeräte in der Automobiltechnik
Control systems for the automotive market
- Leistungsmodule
Power modules
- Frequenzumrichter
Frequency converters
- Schaltnetzteile
Switch mode power supplies



TK, Lastminderung und Langzeitstabilität / TCR, power derating and long term stability



Vorschlag für Leiterplatten Layout (Leitkleben) / Proposal for pcb-layout (conductive adhesive)



Layout, wenn TK < 20 ppm/K notwendig für R zwischen 30 und 80 mΩ /
Layout if TK < 20 ppm/K is required for R in between 30 and 80 mΩ

Verarbeitungsvorschlag / Recommended processing

Temperatur /
Temperature T_{max} 180 °C

Zeit / Time t_{max} 30 min

RoHS 2002/95/EG konform seit Produktstart.

Ausführliche Informationen erhalten Sie auf unserer Homepage:
www.isabellenhuette.de

RoHS 2002/95/EC compliance since product launch.

For more information please visit our website:
www.isabellenhuette.de

GURTINFORMATIONEN TAPE & REEL INFORMATION

Norm / Specification DIN EN 60286-3

Anzahl Bauteile / Parts per reel 12500

Gurt Material / Tape material Kunststoff / plastic

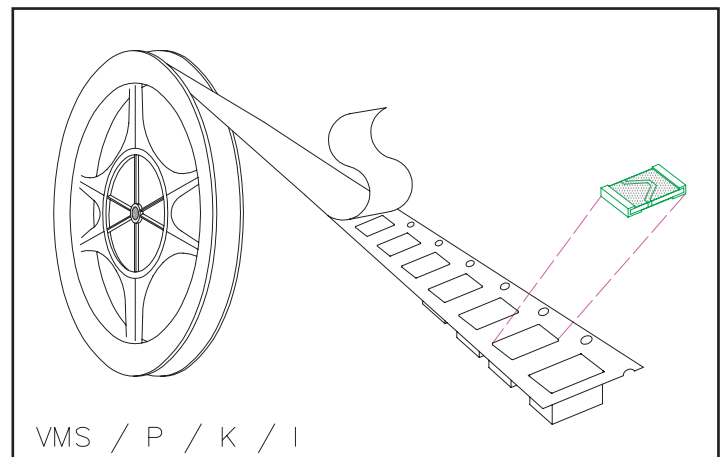
BESTELLBEZEICHNUNG / ORDERING CODE

VMP-R080-1.0-A

Typ Widerstandswert Toleranz

Type Resistance value Tolerance

VMP 80 mOhm 1.0 %



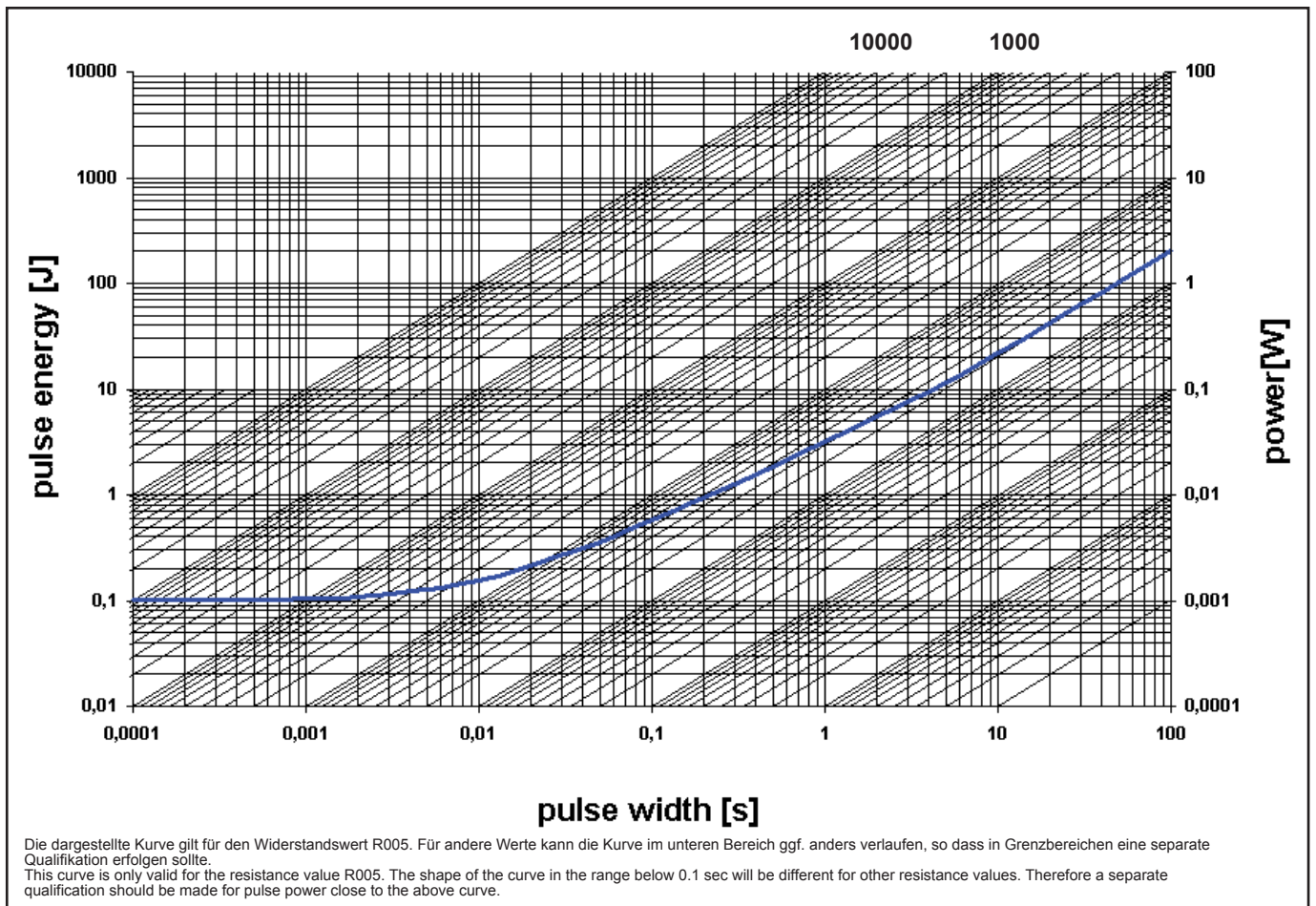
Gewährleistung

Alle Angaben über Eignung, Verarbeitung und Anwendung unserer Produkte, technische Beratung und sonstige Angaben erfolgen nach bestem Wissen, befreien den Käufer jedoch nicht von eigenen Prüfungen und Versuchen.

Warranty

All information regarding the suitability, workability and applicability of our products, all technical advice and other information are provided to the best of our knowledge and belief, but shall not discharge the buyer from his own examinations and tests.

**Grenzkurve für maximale Pulsenergie bzw. Pulsleistung für Dauerbetrieb /
Maximum pulse energy respectively pulse power for continuous operation**



Spezifikation / Specification AEC-Q200			
Parameters	Test Conditions	Specified values	Typical test data
Maximum Temperature for full power operation	110 °C	110 °C	
Working Temperature	-55 to 170 °C	-55 to 170 °C	
Thermal Shock	MIL-STD-202 method 107-B1	±0.1 %	±0.05%
Solderability	MIL-STD-202 method 208	> 95 % coverage	
Resistance to Solvents	MIL-STD-202 method 215, 2.1a, 2.1d	no damage	
Low Temperature Storage and Operation	MIL-STD-26E	±0.1 %	±0.02
Resistance to Soldering Heat	MIL-STD-202 method 210	±0.1 %	±0.05
Moisture Resistance	MIL-STD-202 method 106	±0.1 %	±0.05
Mechanical shock	MIL-STD-202 method 213-A	±0.1 %	±0.02
Vibration, High Frequency	MIL-STD-202 method 204-B	±0.2 %	±0.05
Operational Life	MIL-STD-26E	±0.7 %	±0.5
High Temperature Exposure	MIL-STD-202 method 108-F	±0.5 %	±0.3
High Temperature Exposure	140 °C, 2000 h	±0.3 %	±0.1
Current Noise	MIL-STD-202 method 308	n. a. for R< 10ohm	
Voltage Coefficient (%/V)	MIL-STD-202 method 309	linearity error less than 120dB	
Resistance Temperature Characteristic	MIL-STD-202 method 304 (20-60°C)	<20 ppm/K	10 ppm/K
Thermal EMF	0 - 100 °C	2 µV/ °K max.	0.5µ°K
Frequency Characteristic (R<20mOhm)	inductance	< 2 nH	< 0.5