

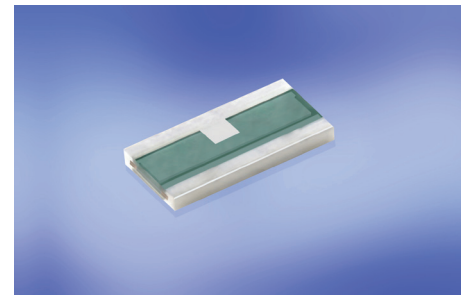
ISA-PLAN® - SMD precision resistors

TECHNICAL DATA			
Resistance values	3 / 6 mOhm *	1 / 5 mOhm *	1 / 5 / 10 / 30 / 200 mOhm *
Tolerance	1 %, 2 %, 5 %	1 %	5 %
Temperature coefficient	< 50 ppm/K (20 °C - 60 °C)		
Applicable temperature range	-65 °C to +170 °C		
Load capacity	2 W		
Internal heat resistance (R_{thi})	< 20 K/W		
Dielectric withstanding voltage	200 V AC/DC		
Inductance	< 1 nH		
Stability (Nominal load) deviation T_K = Terminal temperature	< 0.5 % after 2000 h ($T_K = 100$ °C) < 0.7 % after 2000 h ($T_K = 130$ °C)		

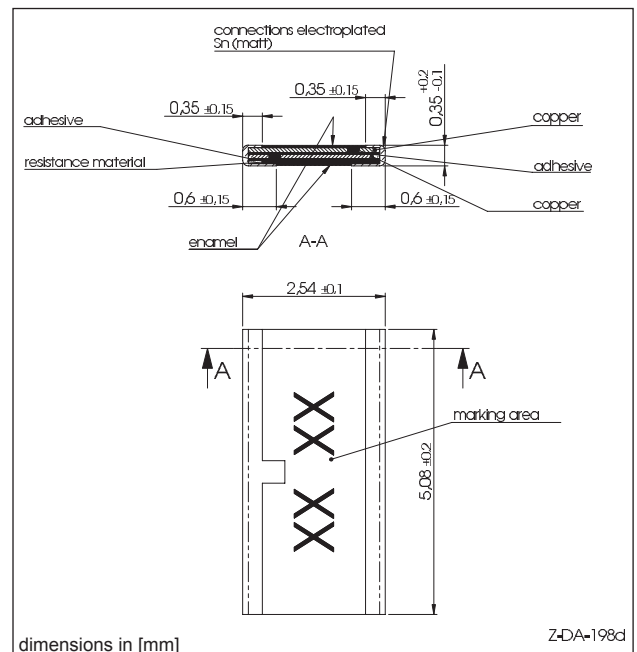
* Samples available

FEATURES

- Low resistance values from 1 mOhm
- 2 W permanent power at 130 °C
- Constant current up to 45 A (1 mOhm)
- Small size
- High pulse power rating
- Excellent long-term stability
- Mounting: Reflow- and IR-soldering
- AEC-Q200 qualified



Size 1020

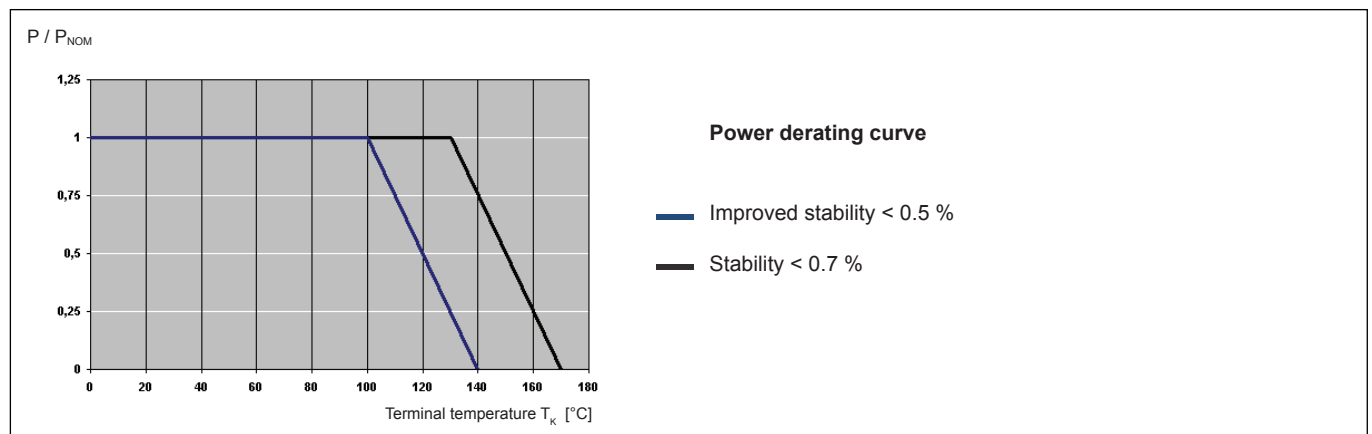
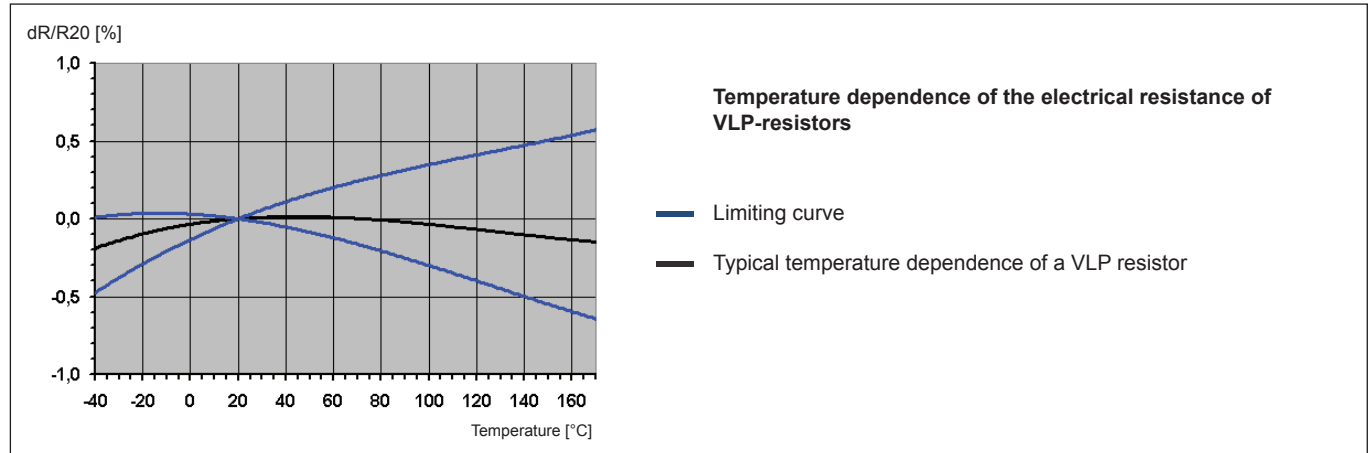


At start of series release without marking

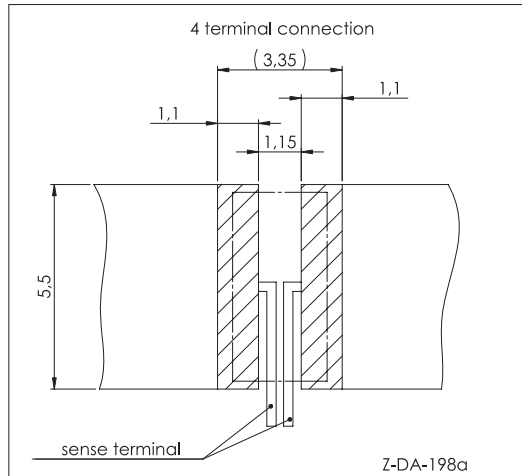
APPLICATION

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

TCR, power derating



Proposal for pcb-layout (Reflow-soldering)



dimensions in [mm]

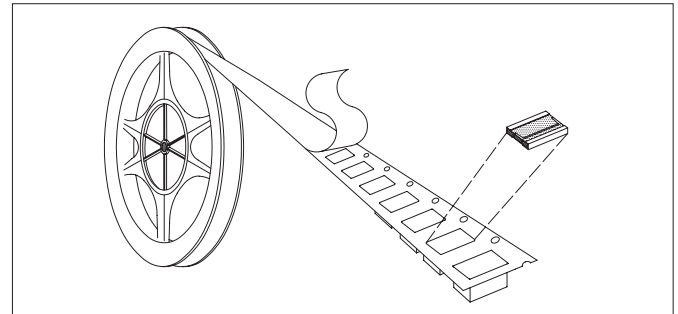
Recommended solder profile			
Reflow-, IR-soldering			
Temperature [°C]	260	255	217
Time [s]	peak	40	90

TAPE & REEL INFORMATION	
Specification	DIN EN 60286-3
Parts per reel	10,000 pcs.

ORDERING CODE		
VLP-R006-1.0		
Type	Resistance value	Tolerance
VLP	6 mOhm	1.0 %

RoHS 2011/65/EU compliance.

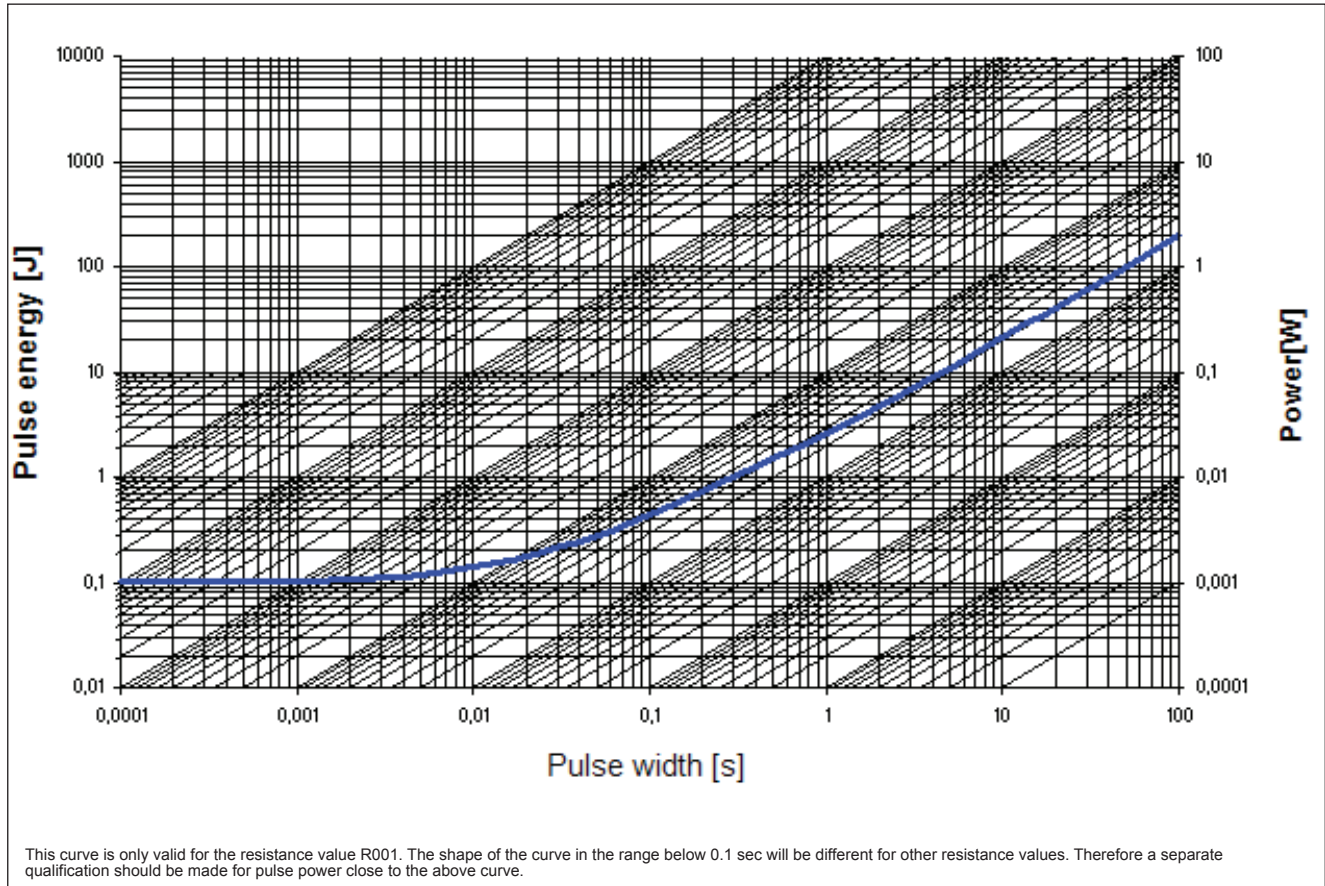
For more information please visit our website:
www.isabellenhuette.de



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.

Maximum pulse energy respectively pulse power for permanent operation



Specification		
Parameters	Test Conditions	Specified values
Temperature Cycling	2000 cycles (-55 °C to +150 °C)	±0.7 %
Low Temperature Storage and Operation	-65 °C for 24 h	±0.1 %
Resistance to Soldering Heat	260 °C for 10 sec / 8 h steam aging	±0.1 %
Moisture Resistance	MIL-STD-202 method 106	±0.5 %
Mechanical Shock	100 g, 6 ms half sine	±0.2 %
Vibration, High Frequency	20 g, 10-2000 Hz	±0.2 %
Operational Life	2000 h, T_{Kmax} at nominal load	±0.7 %
High Temperature Exposure	2000 h / 170 °C	±0.7 %
Bias Humidity	+85 °C, 85 r.F., 1000 h	±0.8 %