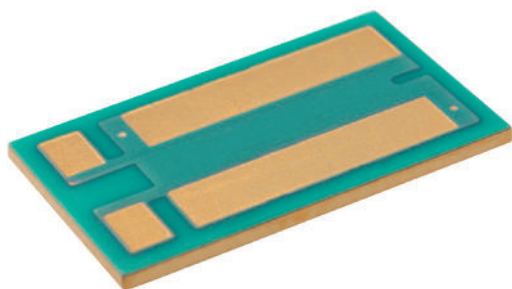




ISA-PLAN® // PRECISION RESISTORS



PLU (2439)



Features

- 5 W permanent power
- Continuous current load up to 70 A
- Resistor with Kelvin connection
- Au-plated bond pads
- Reverse side covered with gold flash
- Hybrid assembly: bonding and gluing
- AEC-Q200 qualified
- RoHS 2011/65/EU compliant



Applications

- Current sensor for power hybrid applications
- Frequency converters
- Power modules
- HDI (High Density Integration)

Technical data

Resistance values	mOhm	1
Tolerance	%	5 ¹
Temperature coefficient (20-60 °C)	ppm/K	< 50 ¹
Applicable temperature range	°C	-55 to +170 ²
Power rating	W	5
Internal heat resistance (R _{thi})	K/W	< 4
Dielectric withstanding voltage	VAC	100
Inductance	nH	< 10
Stability (Nominal load) deviation after 2000h, T _K = Terminal temperature		< 0.5 % (T _K =120 °C) < 1.0 % (T _K =150 °C)

¹ Exact value depends on bonding position

² See table on page 2

Ordering code

PLU - R001 - 5.0

..... Tolerance
..... Resistance value [Ohm] / „R“ represents decimal point
..... Type



PLU (2439)

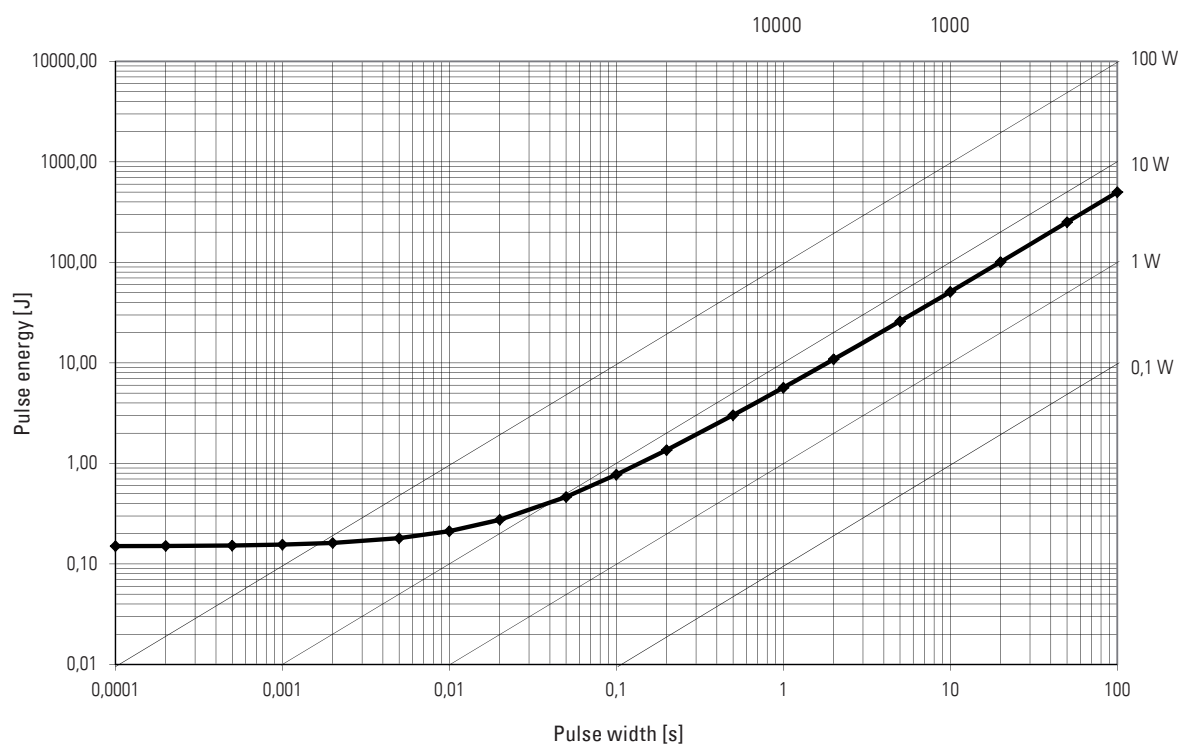
Tape and reel information

Specification		DIN EN 60286-3
Tape width	mm	16
Parts per reel	pcs	3000

Specification

Parameters	Test conditions	Specified values
Temperature Cycling	2000 cycles (-55 °C to +150 °C)	±0.5 %
Low Temperature Storage and Operation	-65 °C for 24 h	±0.2 %
Resistance to Soldering Heat	260 °C for 10 sec / 8h steam aging	n.a.
Moisture Resistance	MIL-STD-202 method 106	±0.5 %
Mechanical Shock	100 g, 6 ms half sine	±0.1 %
Vibration, High Frequency	20 g, 10-2000 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., 1000 h	±0.7 %

Maximum pulse energy respectively pulse power for permanent operation

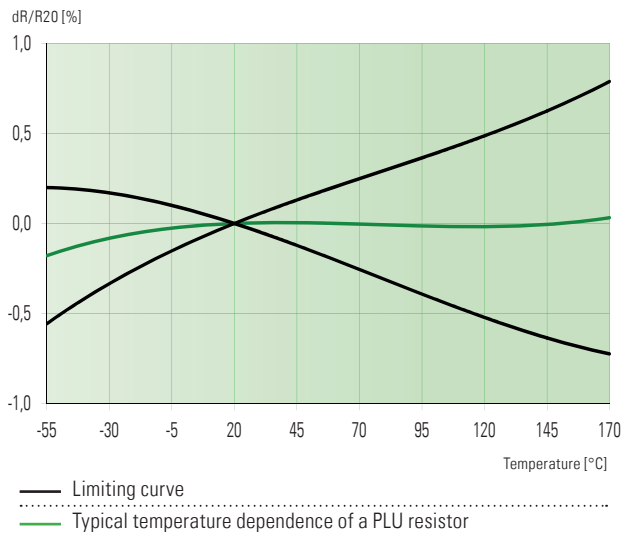




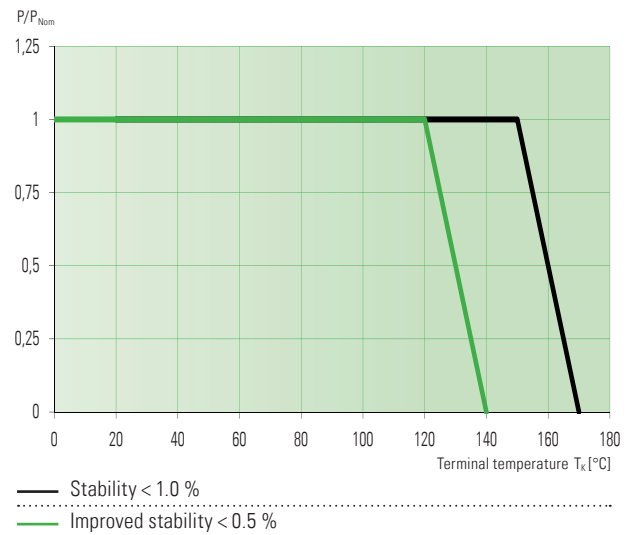
PLU (2439)

Temperature dependence of the electrical resistance

* Exact value depends on bonding position



Power derating curve



Disclaimer // All products, product specifications and data are subject to change without notice.

The product specifications do not expand or otherwise modify Isabellenhütte's terms and conditions of sale, including but not limited to, the warranty expressed therein. Isabellenhütte makes no warranty, representation or guarantee other than as set forth in its terms and conditions of sale.

Information provided in datasheets and/or specifications may vary from actual results in different applications. Any statements made by Isabellenhütte regarding the suitability of products for certain types of applications are based on its knowledge of typical requirements that are often placed on its products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in the application intended.

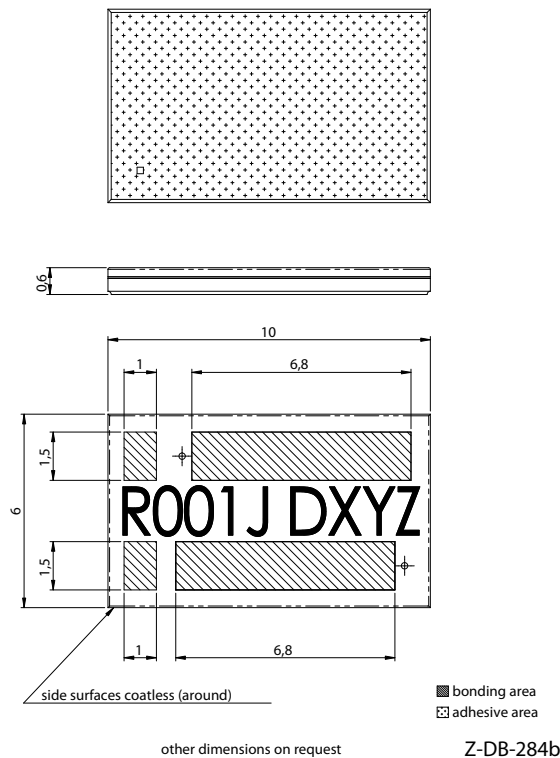
No license, express or implied, or otherwise, to any intellectual property rights is granted by this document.

Any and all liability arising out of the application or use of any product shall be as set forth in Isabellenhütte's terms and conditions of sale.

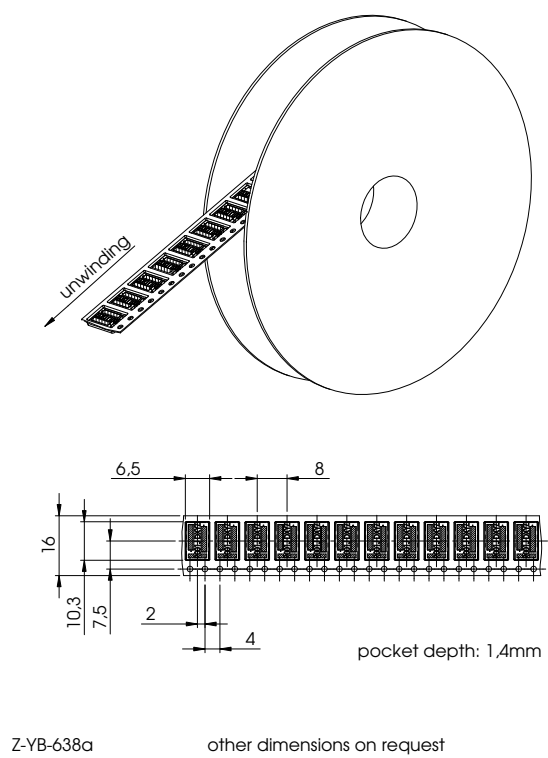


PLU (2439)

Mechanical dimensions [mm]



Tape and reel information [mm]



Proposal for bond-connection [mm]

