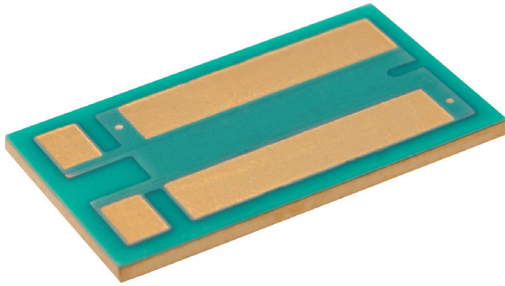




ISA-PLAN® // PRECISION RESISTORS



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

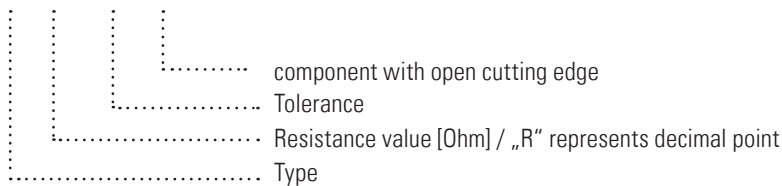
Resistance values	mOhm	1
Tolerance	%	5 ¹
Temperature coefficient (20-60 °C)	ppm/K	< 50 ¹
Applicable temperature range	°C	-55 to +170 ²
Power rating	W	5
Internal heat resistance (R _{thi})	K/W	< 4
Dielectric withstanding voltage	VAC	100
Inductance	nH	< 10
Stability (Nominal load) deviation after 2000h,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



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. This document is subject to change without notice.



PLU (2439)

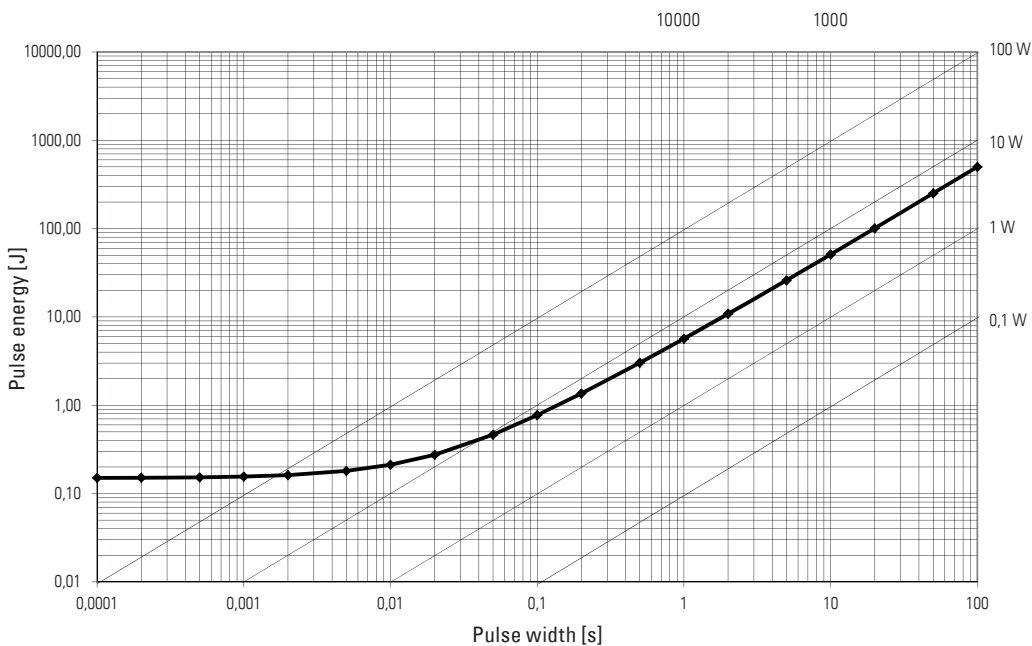
Tape and reel information

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

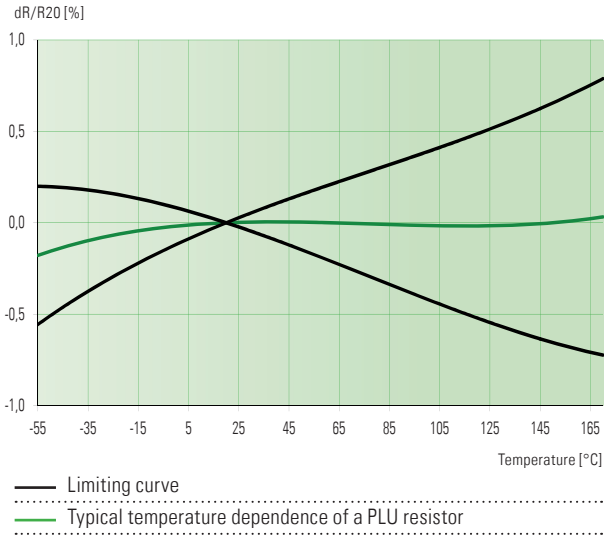




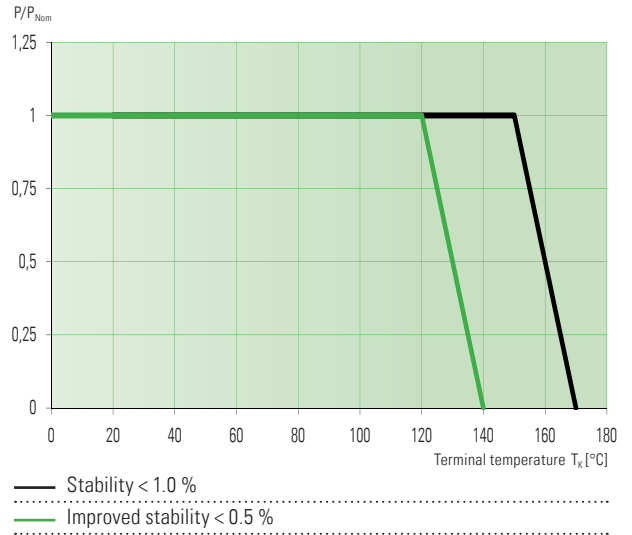
PLU (2439)

Temperature dependence of the electrical resistance

* Exact value depends on bonding position



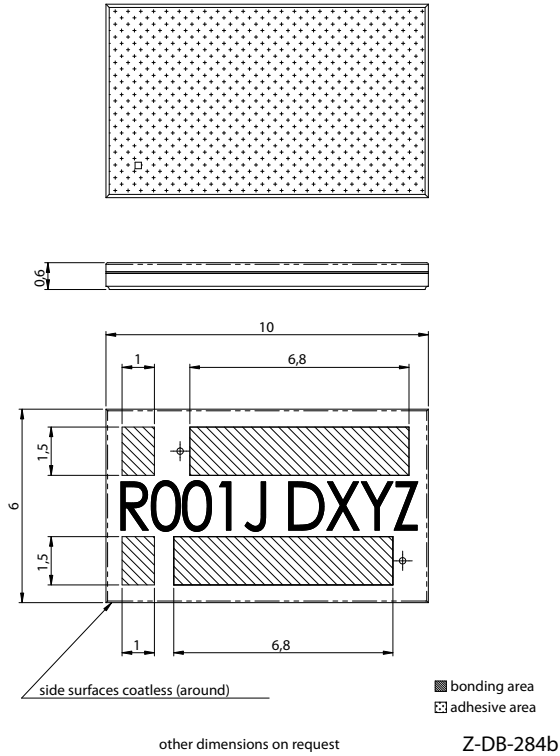
Power derating curve



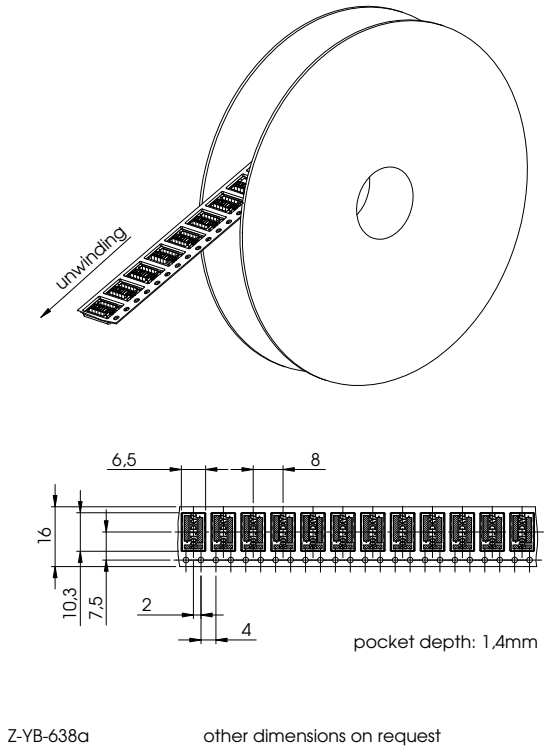


PLU (2439)

Mechanical dimensions [mm]



Tape and reel information [mm]



Proposal for bond-connection [mm]

