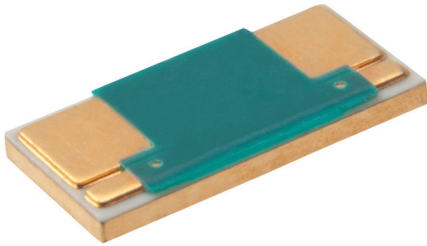




## ISA-PLAN® // PRECISION RESISTORS



### PMH-D (2512)



#### Features

- 5 W permanent power
- Continuous current load up to 50 A
- Resistor with Kelvin connection
- Au-plated bond pads (0.1 µm typ.)
- Reverse side covered with gold flash (0.1 µm typ.)
- 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

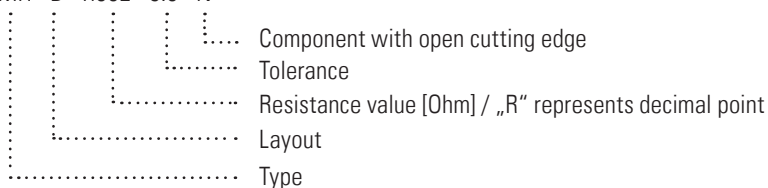
Resistance values	<b>mOhm</b>	2
Tolerance	<b>%</b>	5 <sup>1</sup>
Temperature coefficient (20-60 °C)	<b>ppm/K</b>	< 50 <sup>1</sup>
Applicable temperature range	<b>°C</b>	-55 to +170 <sup>2</sup>
Power rating	<b>W</b>	5
Internal heat resistance (R <sub>thi</sub> )	<b>K/W</b>	< 10
Dielectric withstanding voltage	<b>VAC</b>	100
Inductance	<b>nH</b>	< 3
Stability (Nominal load) deviation after 2000h, T <sub>k</sub> = Terminal temperature		< 0.5 % (T <sub>k</sub> =90 °C) < 1.0 % (T <sub>k</sub> =120 °C)

<sup>1</sup> Exact value depends on bonding position

<sup>2</sup> See table on page 2

#### Ordering code

PMH - D - R002 - 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.



## PMH-D (2512)

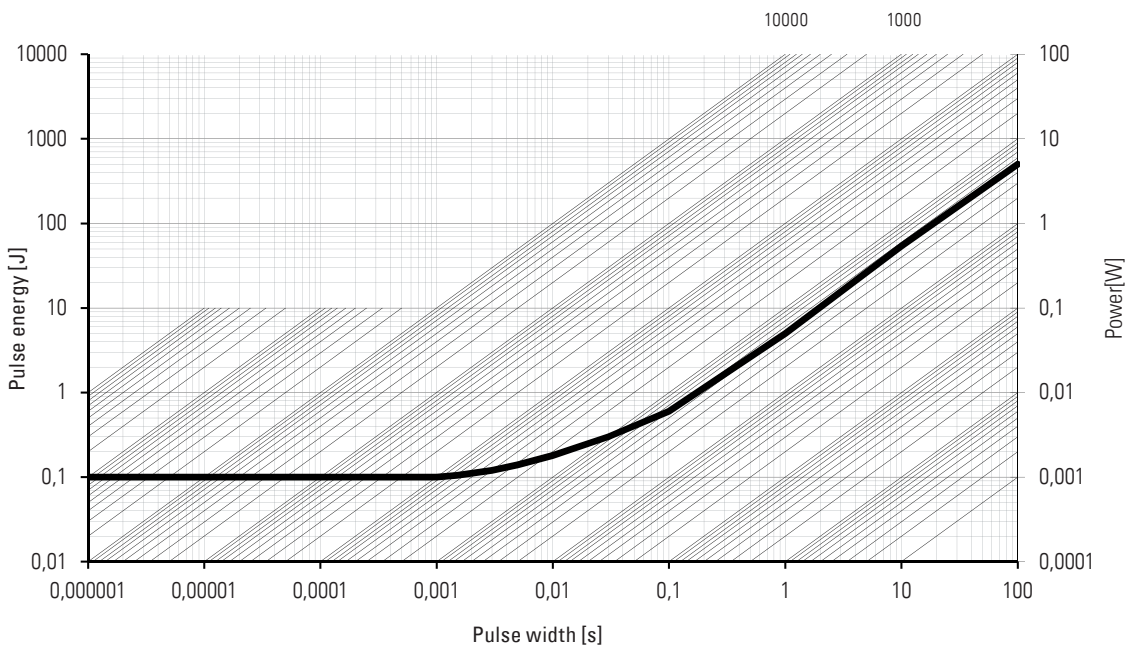
### Tape and reel information

Specification	DIN EN 60286-3	
Tape width	<b>mm</b>	12
Parts per reel	<b>pcs</b>	5000

### 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, $T_k$ 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



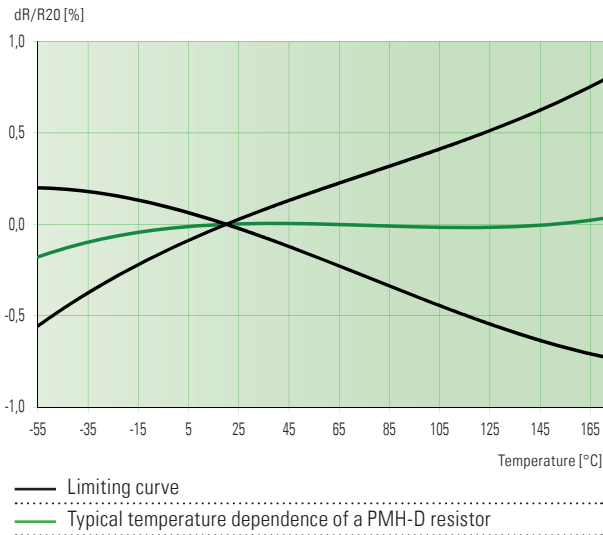
— dR/R0 < 1 % after 1,000,000 cycles



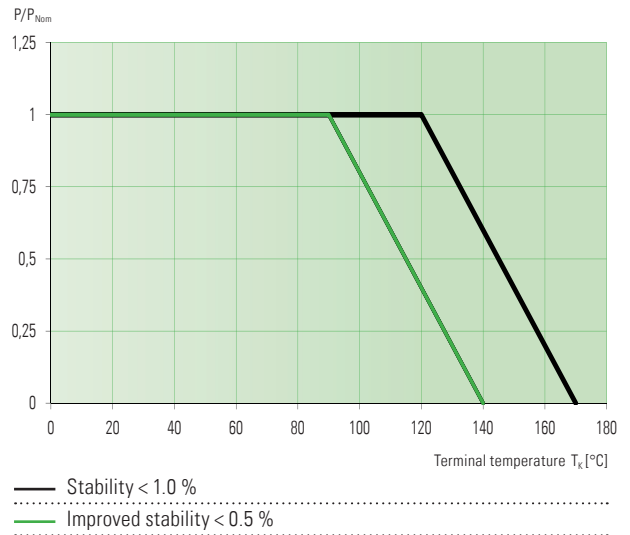
## PMH-D (2512)

### Temperature dependence of the electrical resistance

\* Exact value depends on bonding position



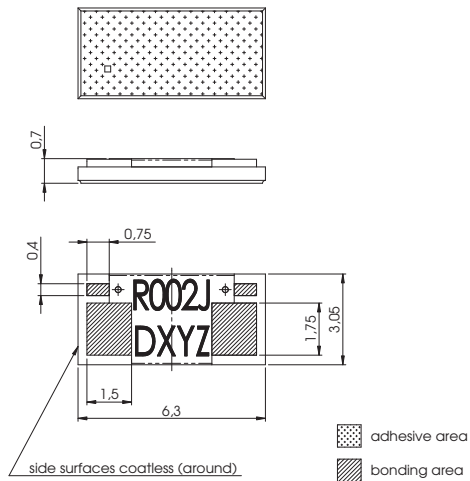
### Power derating curve





**PMH-D (2512)**

**Mechanical dimensions [mm]**

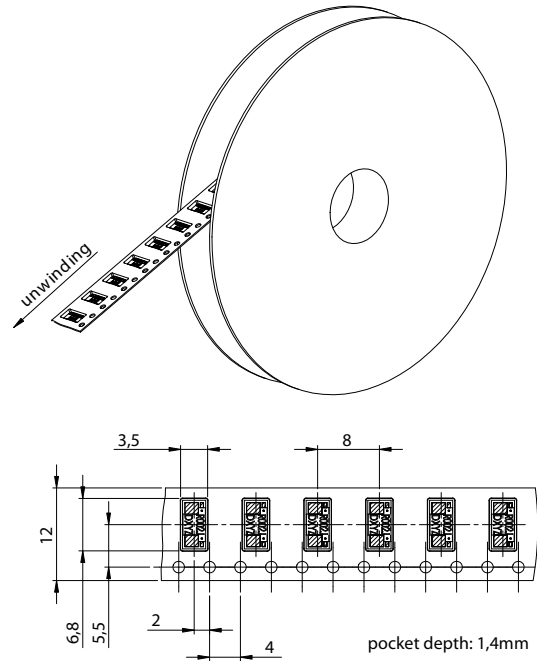


PMH-D

other dimensions on request

Z-DB-348e

**Tape and reel information [mm]**

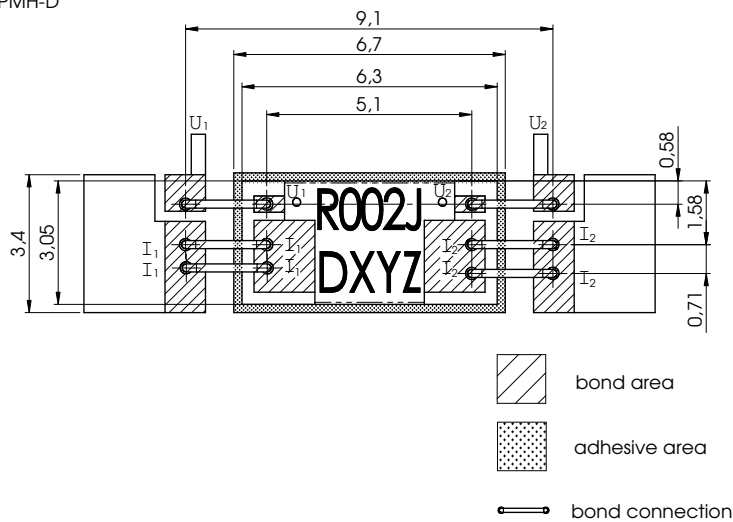


other dimensions on request

Z-YB-639a

**Proposal for bond-connection [mm]**

PMH-D



Z-DB-367a