UXPA300 Planar High-Power Resistors

Technical Features

- Non-inductive thick-film design
- Meets ROHS requirements
- Good pulse-load capability
- Easy to install
- All raw materials meet UL94V-0
- Suitable for power generation, power transmission, variable-speed drives and other electrical equipment



Applications

• Widely used in the instrument transformer industry
• Motor drive and control circuits
• Medical equipment (X-ray, etc.)
• High-voltage power supplies and new energy applications

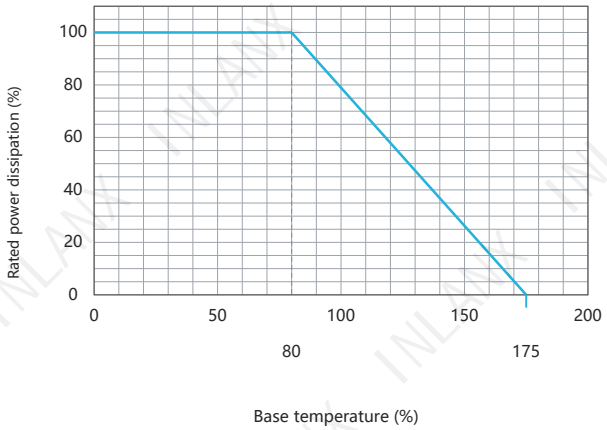
Ordering Guide

Model: UXPA300
Resistance: 100R
Tolerance: 5%
Special specifications can be customized by agreement

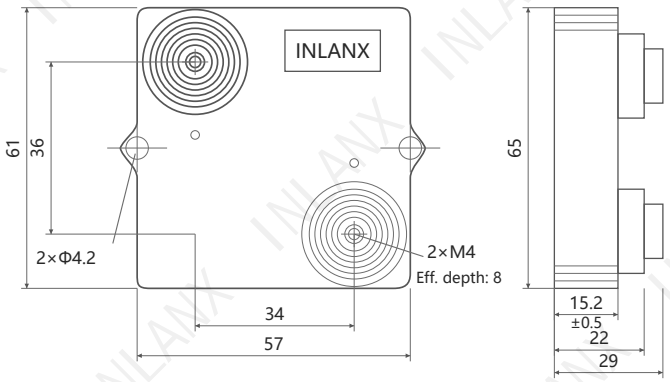
Applicable Standards

IEC60115-1:2001(GB/T5729-2003), MIL-STD-202, MIL-R-39009D

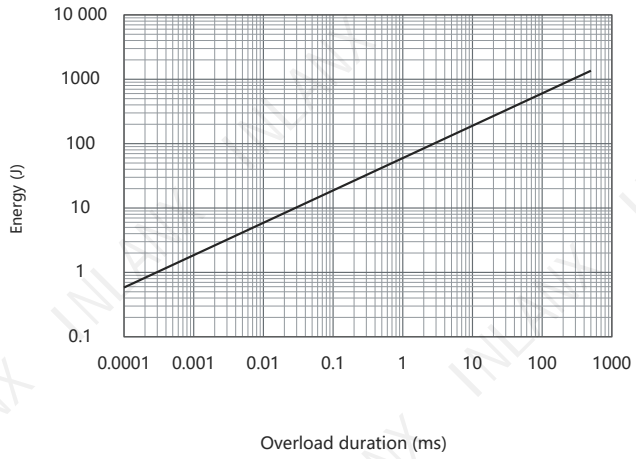
Power Derating Curve



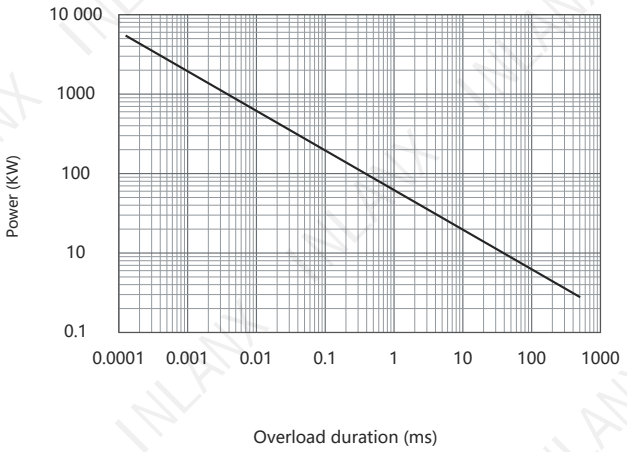
Outline Dimensions



Energy (E) Curve



Power Curve



Main Technical Parameters

Resistance range	1Ω~1MΩ
Resistance tolerance	±5% ~ ±10%
Temperature coefficient range	±150PPM/°C (25°C~105°C); other requirements available by agreement
Central baseplate temperature ≤85°C	Rated power: 300W
Maximum working voltage	5KVDC
Peak current	Up to 1500 Amp at low resistance values and narrow pulse widths
Insulation withstand voltage	6KVrms,50Hz; up to 12KVrms on request
Insulation resistance	500V, minimum 10GΩ
Humidity resistance	56 days /40°C RH ≥95%, ▵ R ≤ ±(0.25%+0.001Ω)
Operating temperature range	-55°C~150°C
Temperature cycling	-55°C /+125°C (0.5h each), 5 cycles; ▵ R ≤ ±(0.2%+0.001Ω)
High-frequency vibration	MIL-Std-202,Method 204,cond.D, ▵ R ≤ ±(0.2%+0.001Ω)
Short-time overload	450W,70°C,10 seconds, ▵ R ≤ ±(0.4%+0.001Ω)
Terminal mounting	M5/M4 screws, maximum torque 1.5Nm
Resistor mounting	M4 screws, maximum torque 1.8Nm
Inductance	≤80nH
Distributed capacitance (Mass)	≤110 pF
Distributed capacitance (Parallel)	≤40 pF