

2000W - 8kV INSULATION  
WATER COOLING,  
CHASSIS MOUNTING,  
NON-INDUCTIVE,  
HIGH VOLTAGE,  
HIGH POWER RESISTORS

## RPU2000

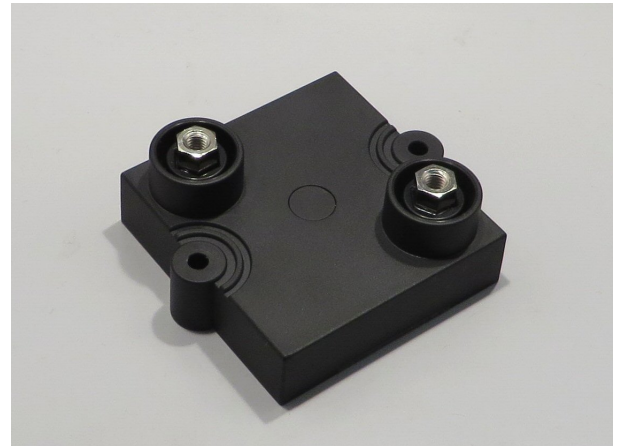
## 特長・用途

小型、8kV 耐電圧、5kV-30kHz 部分放電電圧、水冷、強制空冷放熱シャーシ取付方式の 2000W 高電力抵抗器。

直列インダクタンスは少なく、パルス回路、高周波回路に最適。

2 個の M4 ねじにて簡単に実装が可能。

抵抗器の高さは 25mm ときわめて低く、端子の数は、2 個  
インバータ電源装置、パルス電源装置、高周波増幅器、ハイエンド P A システム、パワーエレクトロニクス機器の、高調波フィルタ抵抗、スナバ抵抗、サージ吸収抵抗、ゲート抵抗、フリーダ抵抗、負荷抵抗、ダンピング抵抗に適合。



## Features and Applications

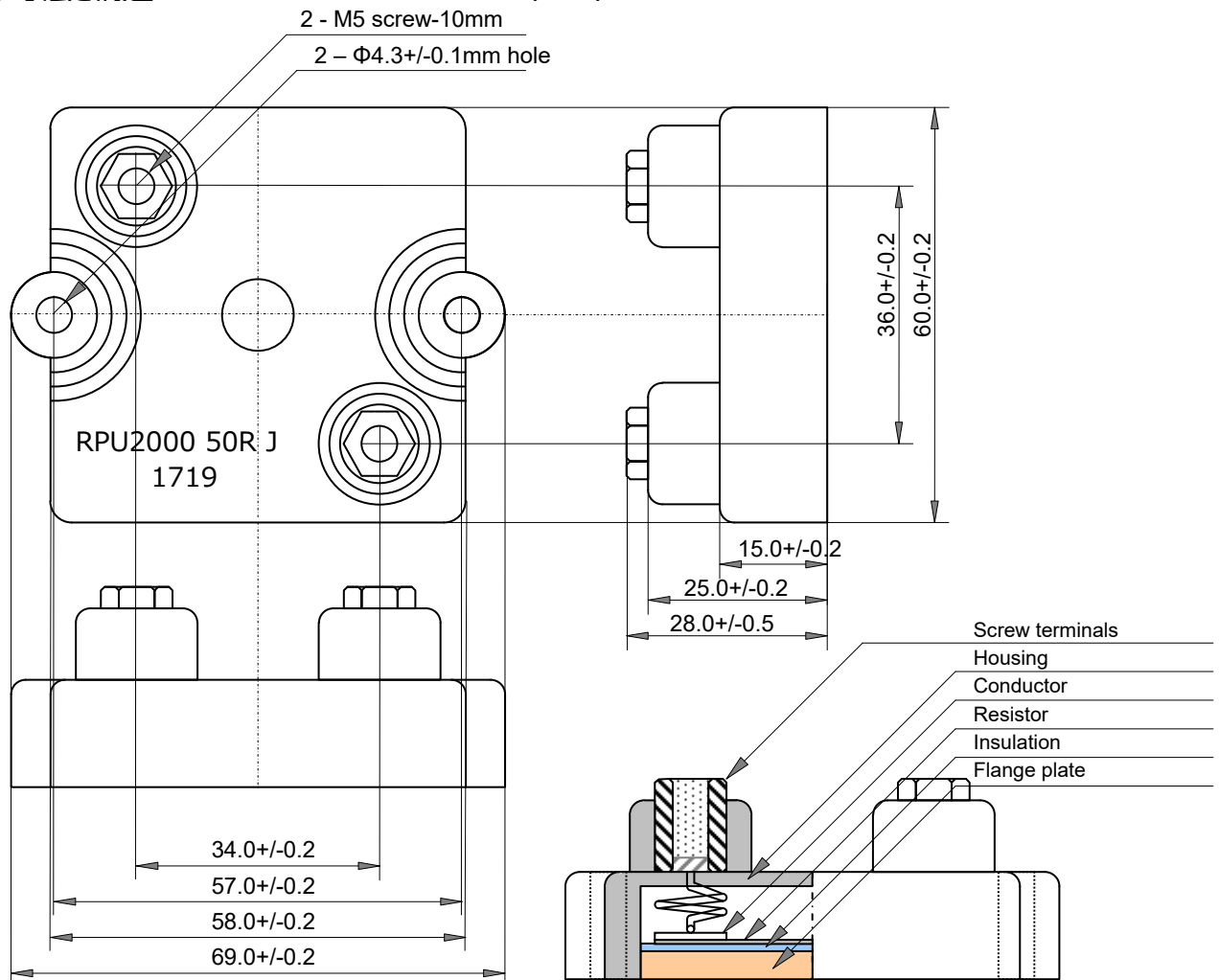
Low profile flat type, 1000W high power resistor. Attaching large air-cooled heat sink or water-cooling operation.

10kV insulation voltage and starting voltage of 5kV - 50kHz partial discharge.

Higher density packing, vibration-proof, insulation withstand voltage and perfect heat dissipation possible.

Applications include harmonic filter resistors, snubber resistors, surge protection, breeder resistor, dummy load, dumping resistor for heavy duty power electronics, power supplies, pulse generators, high frequency amplifiers, theater audio equipment

## 外形寸法と構造 Dimensions and Structure (mm)



2000W

RPU2000

CHASSIS MOUNTING NON-INDUCTIVE HIGH POWER RESISTORS

品名呼称 Ordering Information

|                 |            |                   |                |             |                   |
|-----------------|------------|-------------------|----------------|-------------|-------------------|
| Type<br>RPU2000 | TCR<br>--- | Resistance<br>101 | Tolerance<br>J | Code<br>Z00 | Note              |
| RPU2000         | ---        | 101               | J (5%)         | Z00         | RoHS, Box Package |
|                 |            | E24+ (*)          |                |             |                   |

(\*) Standard resistance value, E24+

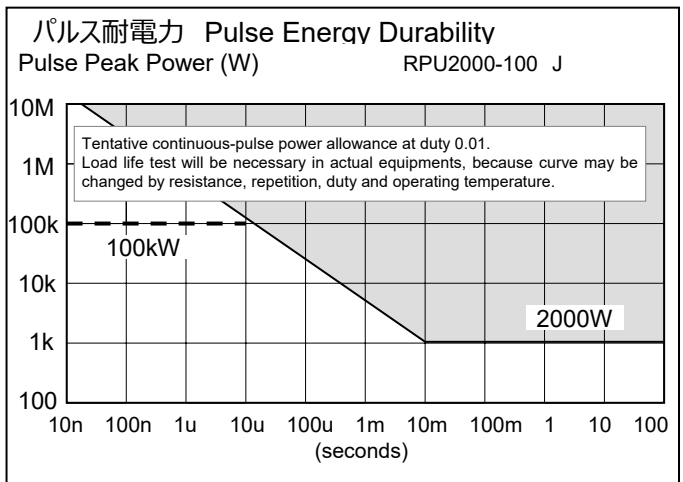
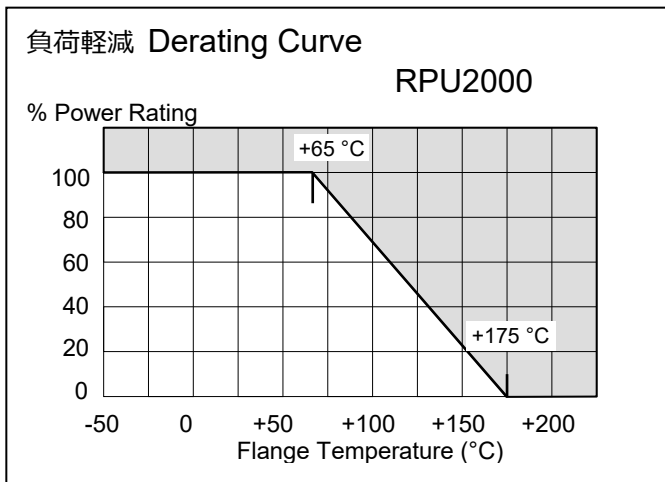
|     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1.0 | 1.1 | 1.2 | 1.3 | 1.5 | 1.6 | 1.8 | 2.0 | 2.2 | 2.4 | 2.5 | 2.7 | 3.0 | 3.3 |
| 3.6 | 3.9 | 4.0 | 4.3 | 4.7 | 5.0 | 5.1 | 5.6 | 6.2 | 6.8 | 7.5 | 8.0 | 8.2 | 9.1 |

性能 Specifications and Performances

| Items   |                       | Performances                    | Conditions  |
|---------|-----------------------|---------------------------------|---|
| 定格電力    | Rated Power           | 2000 Watts                      | At flange temperature -55 to +75°C                                |
| 短時間過負荷  | Short-time Overload   | 2400 Watts                      | 5 seconds   |
| 熱抵抗     | Heat Resistance       | 0.055 °C/W                      | From resistor to flange   |
| 抵抗値     | Resistance Range      | 0.5ohm to 1 Mohm                |   |
| 抵抗値     | Nominal Resistance    | E24+                            | Additionally, 2.0 and 5.0.  |
| 温度係数    | TCR                   | +/-100 ppm/K (A)                | At 1.0ohm-1Mohm, +/-200ppm/°C at <1.0ohm, for -55 to +155 °C      |
| 許容差     | Tolerance             | +/-5% (J)                       |   |
| 動作温度範囲  | Operation Temp.       | -55 to +175 °C                  | At resistor element surface                                       |
| 最高使用電圧  | Max. Applied Voltage  | 5000V or $E = \sqrt{P \cdot R}$ | P shows rated power (W), R resistance value (ohm), E voltage (V)  |
| 絶縁耐電圧   | Insulation Voltage    | 8000 V-50Hz                     | 60 seconds between terminals and flange. Leak current below 0.5mA |
| キャパシタンス | Capacitance           | 73 pF                           | Resistor terminal - flange  |
| インダクタンス | Inductance            | 108 nH                          | Resistor terminal - Terminal                                      |
| キャパシタンス | Capacitance           | 25 pF                           | Resistor terminal - Terminal                                      |
| 線面距離    | Creeping distance     | 42mm                            |   |
| 空間距離    | Air distance          | 14mm                            |   |
| 負荷寿命    | Load Life             | $\Delta R$ +/-0.40 %            | Continuous power 1000hours.                                       |
| 耐湿性     | Humidity              | $\Delta R$ +/-0.25 %            | 60 °C, 90 to 95%RH, DC0.1W, 1000hours.                            |
| 温度サイクル  | Temperature Cycle     | $\Delta R$ +/-0.20 %            | -55 °C, 30 min., +155 deg C 30min., 5 cycles.                     |
| 絶縁抵抗    | Insulation Resistance | Over 10 G ohm                   | Between terminals and flange., DC 1000V                           |
| 耐振性     | Vibration             | $\Delta R$ +/-0.25 %            | Note 2  |
| 難燃性     | Flammability          | UL94V-0                         | For resistor body   |
| 重量      | Weight                | 120 grams                       |   |

Note 1: Torque: Mounting 1.8 Nm-M4, contacts 2.0Nm-M5 recommend.

Note 2: IEC60068-2-6, displacement 0.75mm or acceleration 100m/sec<sup>2</sup>, 10Hz-54Hz sweep, 10 cycles X-Y-Z direction.



Note: