

1000W - 10kV INSULATION  
WATER COOLING,  
CHASSIS MOUNTING,  
NON-INDUCTIVE,  
HIGH VOLTAGE,  
HIGH POWER RESISTORS

## RPU1000

### 特長・用途

小型、10kV 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 1000W 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

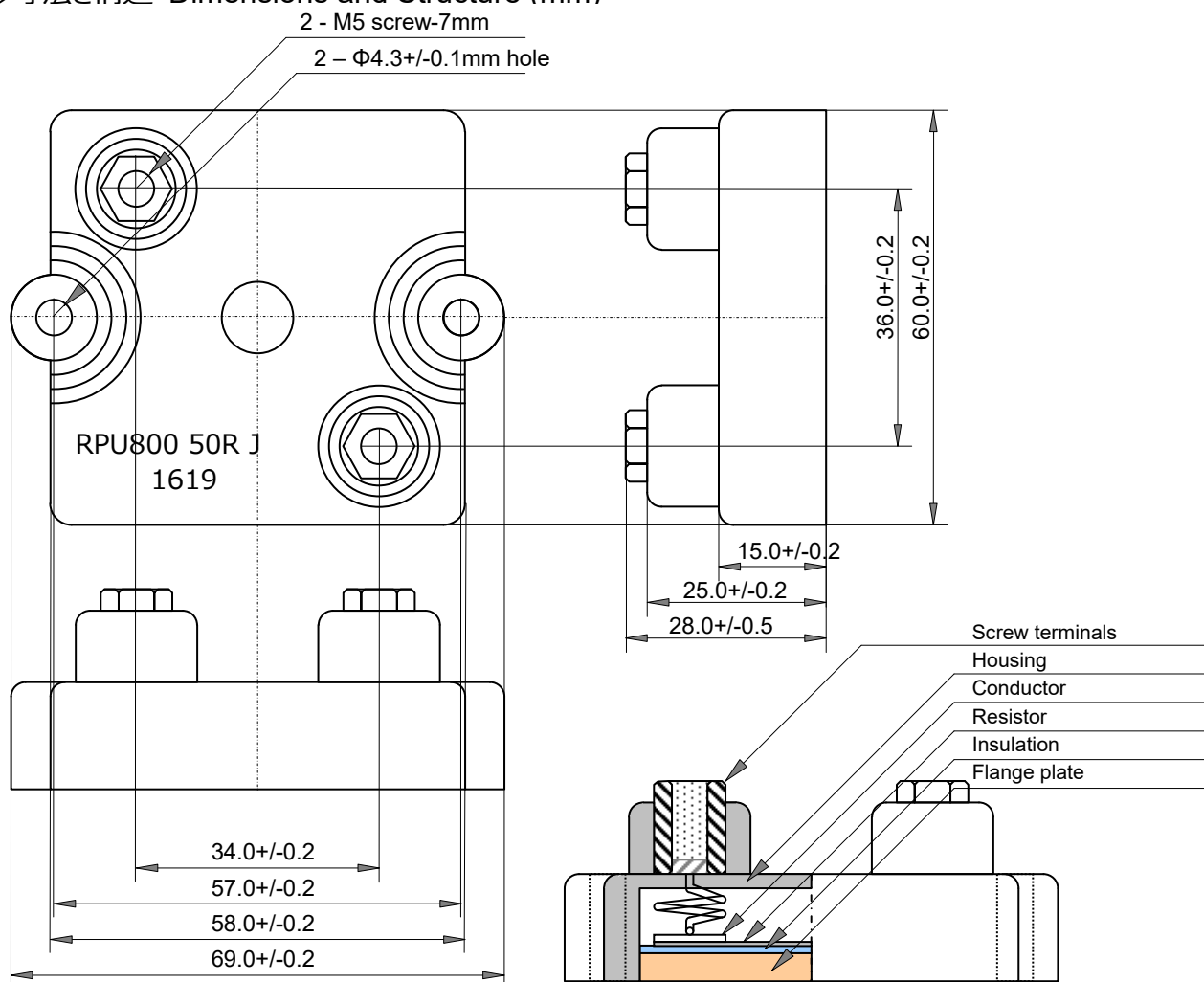
Low profile flat type, 1000W high power resistor. Attaching large  
air-cooled heat sink or water-cooling operation.

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)



1000W

RPU1000

CHASSIS MOUNTING NON-INDUCTIVE HIGH POWER RESISTORS

品名呼称 Ordering Information

Type RPU1000	TCR ---	Resistance 101	Tolerance J	Code Z00	Note
RPU1000	---	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

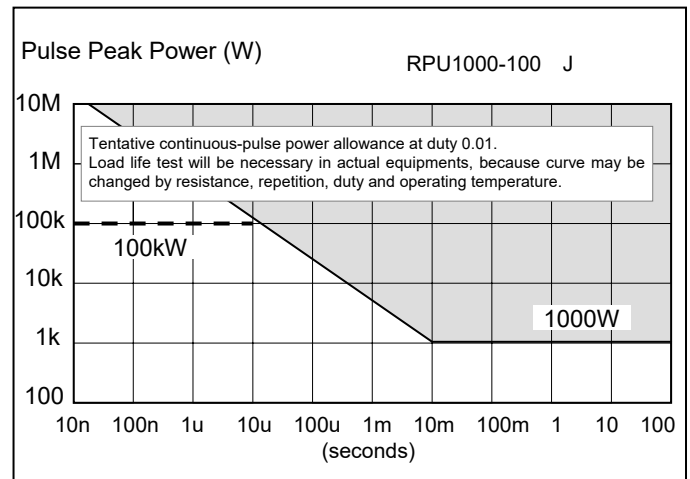
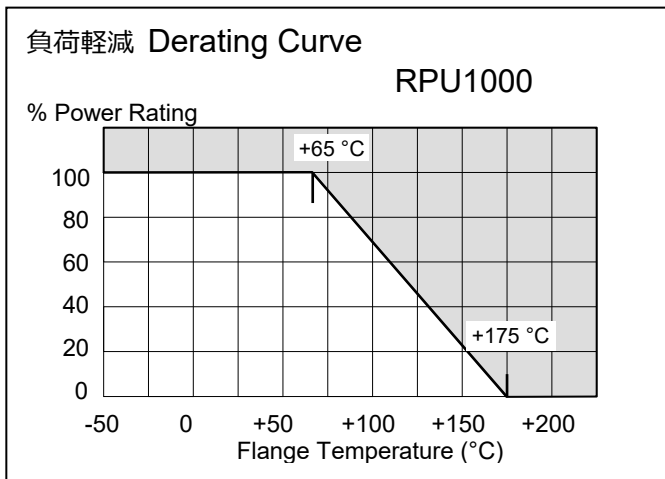
性能 Specifications and Performances

Items		Performances	Conditions
定格電力	Rated Power	1000 Watts	At flange temperature -55 to +75°C
短時間過負荷	Short-time Overload	1200 Watts	5 seconds
熱抵抗	Heat Resistance	0.10 °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
部分放電電圧	Partial Discharge	5 kV-50 kHz	Starting voltage, zero count
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
縁面距離	Creeping distance	42mm	
空間距離	Air distance	14mm	
負荷寿命	Load Life	$\Delta R \pm 0.40\%$	Continuous power 1000hours.
耐湿性	Humidity	$\Delta R \pm 0.25\%$	60 °C, 90 to 95%RH, DC0.1W, 1000hours.
温度サイクル	Temperature Cycle	$\Delta R \pm 0.20\%$	-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	$\Delta R \pm 0.25\%$	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.

パルス耐電力 Pulse Energy Durability



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