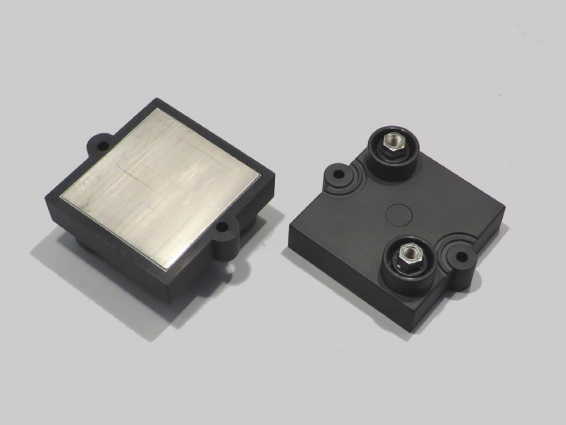
500W
WATER COOLING
CHASSIS MOUNTING
NON-INDUCTIVE,
HIGH VOLTAGE,
HIGH POWER RESISTORS

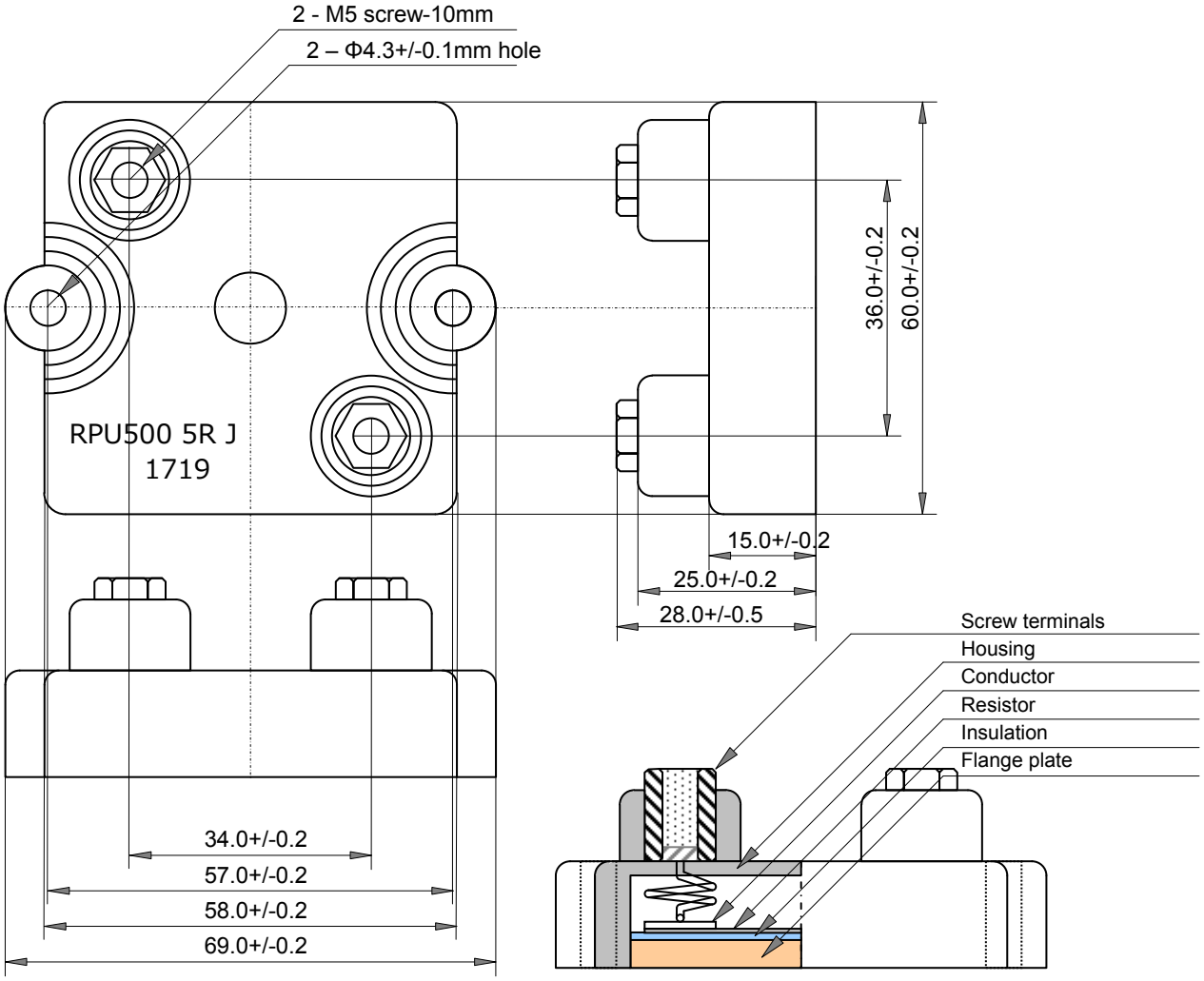


RPU500

Features and Applications

Low profile flat type, 500W high power resistor. Attaching large air-cooled heat sink or water-cooling necessary.
8kV insulating voltage (10kV optionally available) and starting voltage of typical 5kV - 20kHz partial discharge.
Higher density packing, vibration-proof, insulation withstand voltage and perfect heat dissipation possible.
Applications include snubber resistors, surge protection, breeder resistor, harmonic filter resistor, dummy load, gate resistor, dumping resistor for power supplies, pulse generators, high frequency amplifiers, theater audio equipment, etc.

Dimensions and Structure



500W RPU500

CHASSIS MOUNTING NON-INDUCTIVE HIGH POWER RESISTORS

Ordering Information

Type	TCR	Resistance	Tolerance	Code	Note
RPU500	_	101	J	Z00	
RPU500	---	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

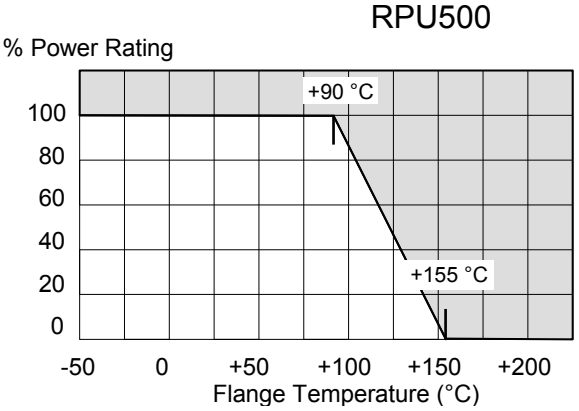
Specifications and Performances

Items	Performances	Conditions
Rated Power	500 Watts	At flange temperature -55 to +90°C
Short-time Overload	1000 Watts	10 seconds mounted on cooler
Heat Resistance	0.115 °C /W	From resistor to flange
Resistance Range	0.5Ω to 1 MΩ	
Nominal Resistance	E24+	Additionally, 2.0 and 5.0.
TCR	+/-150 ppm/K (A)	At 1.0om-1MΩ, +/-250ppm/°C at <1.0Ω, for -55 to +155 °C
Tolerance	+/-5% (J)	
Operation Temp.	-55 to +150 °C	At resistor element surface
Max. Applied Voltage	5000V or $E = \sqrt{P \cdot R}$	P shows rated power (W), R resistance value (Ohms), E voltage (V)
Insulation Voltage	8,000 V – 50 Hz	60 seconds between terminals and flange. Leak current below 0.5mA
Capacitance	110 pF	Resistor terminal - flange
Inductance	80 nH	Resistor terminal - Terminal
Capacitance	30 pF	Resistor terminal - Terminal
Creeping distance	42mm	
Air distance	14mm	
Load Life	ΔR+/-0.40 %	Continuous power 1000hours.
Humidity	ΔR+/-0.25 %	60 °C, 90 to 95%RH, DC0.1W, 1000hours.
Temperature Cycle	ΔR +/-0.20 %	-55 °C, 30 min.,+155 deg C 30min., 5 cycles.
Insulation Resistance	Over 1 GΩ	Between terminals and flange., DC 1000V
Vibration	ΔR +/-0.25 %	Note 2
Flammability	UL94V-0	For resistor body
Weight	168 grams	

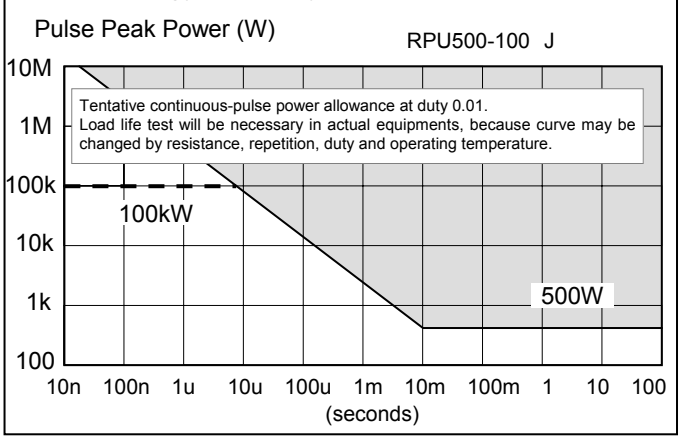
Note 1: Torque: Mounting 1.8 Nm-M4, contacts 2.0Nm-M5 recommend.

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

Derating Curve



Pulse Energy Durability



Note:

20170801