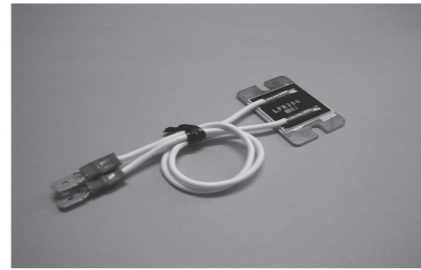


Chassis Mounting Non-inductive High Power Resistors

These are compact, low profile, 250W and 300W high power resistors. An air-cooled heat sink or water-cooling is necessary. The rated power is 250W (single resistor) and 300W (two resistors). Units have M4 screw mounts, wire leads and very low series inductance. Resistors are also vibration-proof and exhibit perfect heat dissipation. Applications include: Sunbber resistors for power supplies, gate resistors, pulse generators, high frequency amplifiers, dumping resistors of theater audio equipment of dividing network of loud speaker systems, etc.



GENERAL SPECIFICATIONS

Model	1) Power Rating[W]	Resistance Range[Ω]	2) TCR	3) Tolerance[%]
TPL250	250W	0.1 Ω to 51K Ω Dual	±100ppm/°C	J (±5)
TPL300	300W	0.1 Ω to 51K Ω Single		

1) Conditions: AT Flange temperature -55 to +25 °C, per resistor unit

2) For -55 °C to +155 °C

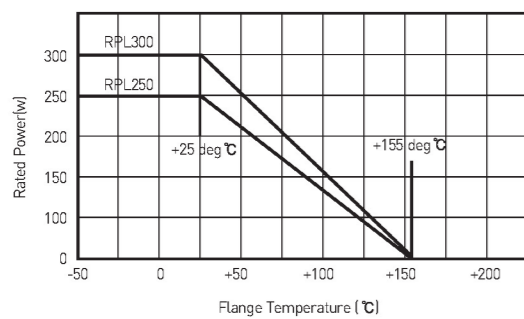
3) F (±1%) is available optionally

CHARACTERISTICS

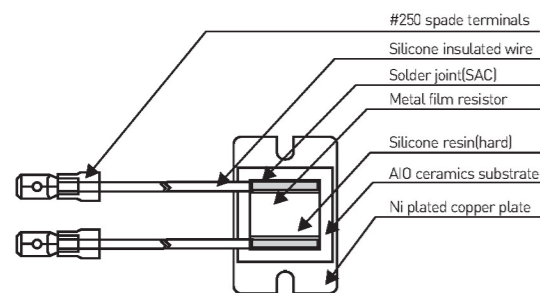
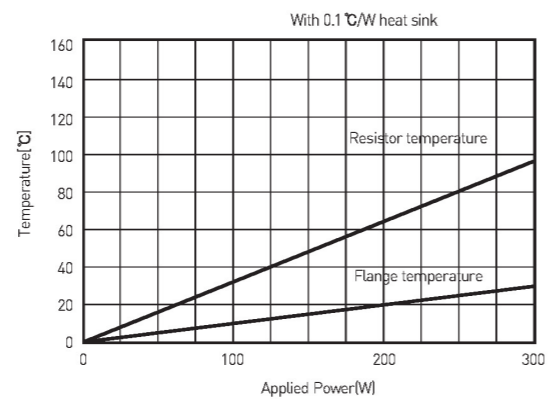
Operation Temp. Range	-55°C ~ +155°C	
Insulation Resistance	Over 1000M Ω	Between terminals and flange.
Dielectric Withstanding Voltage	2000V AC	60seconds. Between terminals and flange
Max. Applied Voltage	$E = \sqrt{P \cdot R}$	
Short Time Overload	Same as rated power	
Thermal Shock	±(1.0%+0.05 Ω)	-55°C, 30minutes, +155°C, 30minutes, 20cycles.
Humidity	±(1.0%+0.05 Ω)	40°C, 90~95%RH, DC 0.1W, 1000hours.
Vibration	±(0.25%+0.05 Ω)	IEC60068-2-6, and specification in sin-wave sweep wave form, 10Hz-55Hz, 10cycles, amplitude 0.75mm, 45min. direction x-y-z.
Load Life	±(1.0%+0.05 Ω)	25°C, 90minutes on, 30minutes off, 1000hours.

DERATING CURVE AND TEMPERATURE RISE CURVE

Derating Curve, TPL300, TPL250

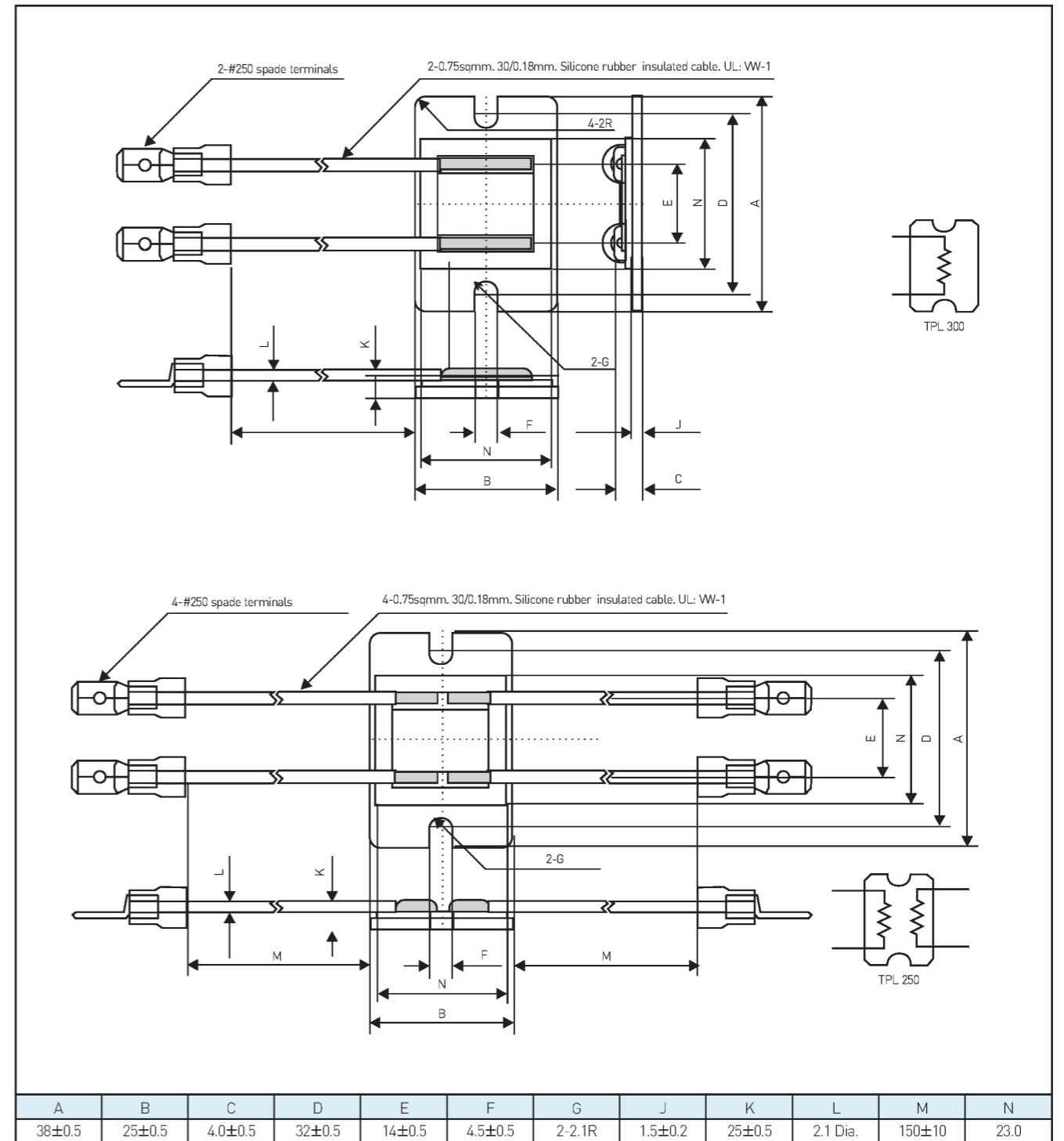


Temperature Rise, TPL300



Note:
Natural air cooling, cooling with blower and a water cooled system can be used for cooling resistor.
When attach a resistor to a cooler, please apply heat conduction grease to the back side of a resistor, and attach it on cooler. Please finish flatly the surface of a cooler to which a resistor is attached.
M4 screw is used with bolting torque of 1.5 N.
When you use resistor with steady rated power, please maintain the temperature of a flange at +25 degrees C.
Please refer load derating, when flange temperature goes to +25 degrees C or more according to the cooling capacity of a cooling system.

DIMENSIONS [mm]



ORDERING PROCEDURE EXAMPLE

Ordering Example	Model	TCR	Resistance	Tolerance[%]	Note
TPL300A20ohmJ	TPL300	A(100ppm/°C)	20 Ω	J (±5)	One resistor
TPL300A100ohmJ	TPL300	A(100ppm/°C)	100 Ω	J (±5)	One resistor
TPL250A50+50ohmJ	TPL250	A(100ppm/°C)	50+50 Ω	J (±5)	Two resistor
TPL250A1K+1KohmJ	TPL250	A(100ppm/°C)	1K+1K Ω	J (±5)	Two resistor