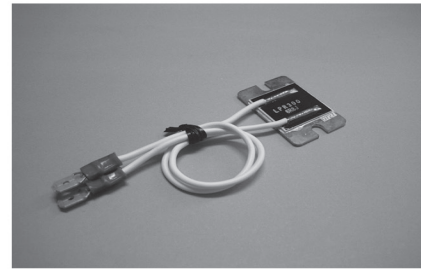


Chassis Mounting Non-inductive High Power Resistors

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: Submer 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	0.1Ω to 51KΩ Dual	±100ppm/°C	J (±5)
TPL300	300W	0.1Ω to 51KΩ Single		

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

2) For -55 °C to +155 °C

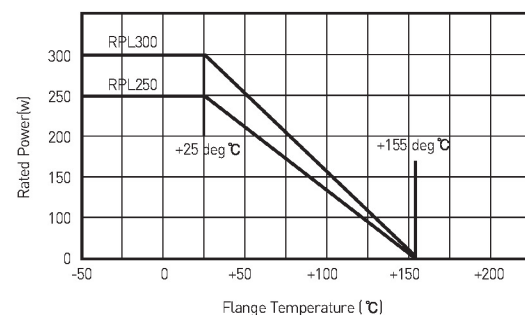
3) F (±1%) is available optionally

■ CHARACTERISTICS

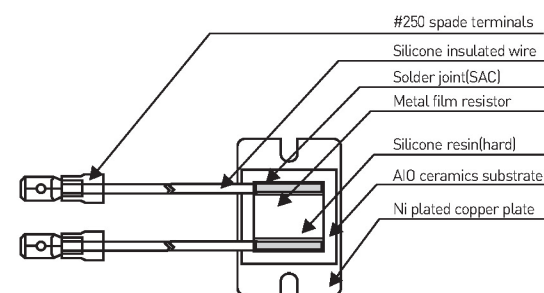
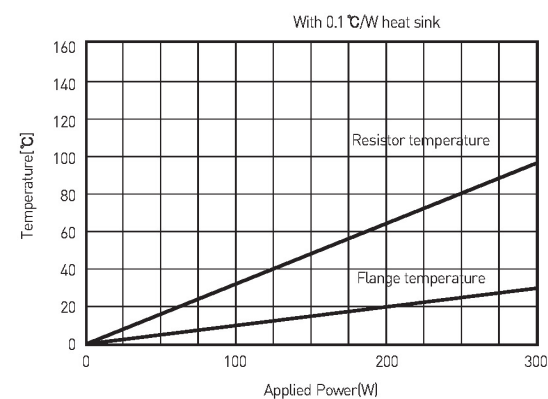
Operation Temp. Range	-55°C ~ +155°C	
Insulation Resistance	Over 1000MΩ	Between terminals and flange.
Dielectric Withstanding Voltage	2000V AC	60seconds. Between terminals and flange
Max. Applied Voltage	$E = \sqrt{P \cdot R}$	
Short Time Overload	Same as rated power	
Thermal Shock	±(1.0%+0.05Ω)	-55°C, 30minutes, +155°C, 30minutes, 20cycles.
Humidity	±(1.0%+0.05Ω)	40°C, 90~95%RH, DC 0.1W, 1000hours.
Vibration	±(0.25%+0.05Ω)	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%+0.05Ω)	25°C, 90minutes on, 30minutes off, 1000hours.

■ DERATING CURVE AND TEMPERATURE RISE CURVE

Derating Curve, TPL300, TPL250

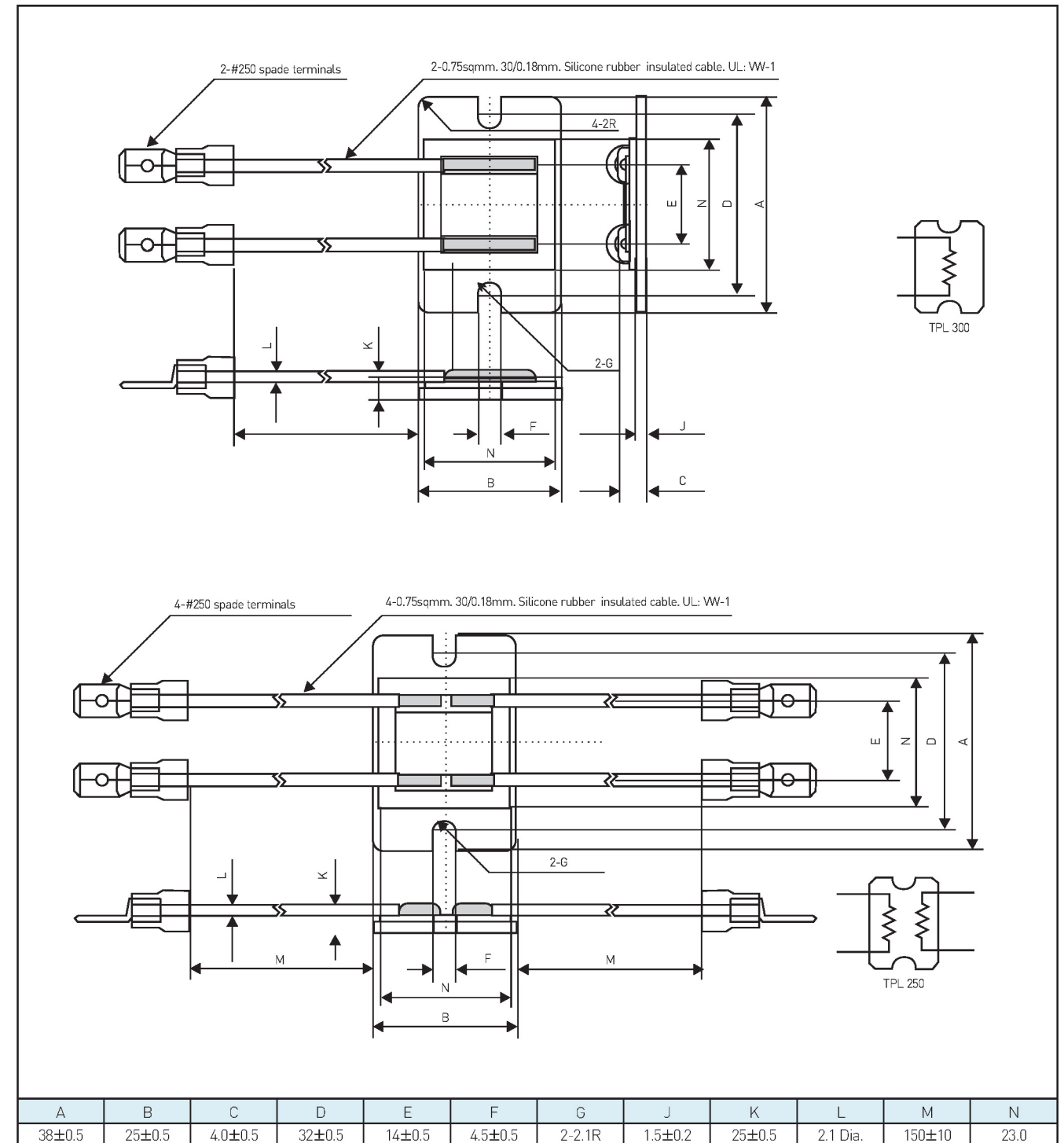


Temperature Rise, TPL300



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]



A	B	C	D	E	F	G	J	K	L	M	N
38±0.5	25±0.5	4.0±0.5	32±0.5	14±0.5	4.5±0.5	2-2.1R	1.5±0.2	25±0.5	2.1 Dia.	150±10	23.0

■ ORDERING PROCEDURE EXAMPLE

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