

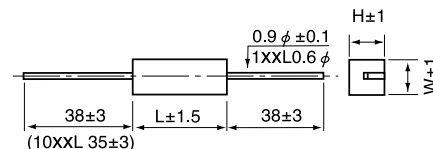
POWER TYPE CEMENT WIRE-WOUND RESISTORS

XXL / XXLN

Wire-wound resistors made by winding a precision resistance wire around a ceramic core, spot-welding the cap terminal, inserting it into a ceramic box, and sealing with silicone cement

XXL Series

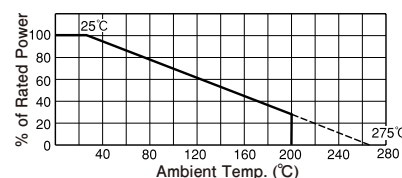
Type	Wattage Rating (W)	Resistance Range (Ω)		Dimensions(mm)			Resistance Tolerance (%)	Temp. Coefficient
		Inductive (XXI)	Non Inductive (XXLN)	L	H	W		
1XXL / 1XXLN	1	0.1~250	1~70	14.5	5.6	6	±0.5 (D) R≥10Ω	±150ppm/°C *Note ±30ppm/°C R≥1Ω
2XXL / 2XXLN	2	0.1~800	1~170	18	6.5	6.5	±1 (F) R≥0.1Ω	
3XXL / 3XXLN	3	0.1~1.5K	1~400	22	8	8	±3 (H)	
5XXL / 5XXLN	5	0.1~2.5K	1~700	22	9.5	9.5	±5 (J)	
7XXL / 7XXLN	7	0.1~5.5K	1~1.8K	35.5	10	9	±10 (K)	
10XXL / 10XXLN	10	0.1~10K	1~3K	50	10	9		



XXLN for non-inductive wire winding

*Note: Customized product on request

Ambient Temp. Derating Curve



Maximum Working Voltage

Type	Maximum Working Voltage
1XXL / 1XXLN	50
2XXL / 2XXLN	125
3XXL / 3XXLN	210
5XXL / 5XXLN	350
7XXL / 7XXLN	620
10XXL / 10XXLN	1000

- Continuous load
 Rated voltage = √(Rated Power x Resistance Value)
 However, this must not exceed the maximum working voltage specified in the table on the left.
- Short-time overload (less than five seconds)
 Maximum working voltage = √(K x Rated Power x Resistance Value)
 *This must not exceed the maximum working voltage specified in the table on the left.
 *"K" is a multiplying factor of short-time overload specified by product type.
 In case of XXL/XXLN series, K value is one(1).
- Transient load(Discharge current, inrush current, pulse, etc.)
 Regardless the resistance values, it must be below the maximum working voltage specified in the table on the left.

Ambient temperature & Power Derating

In case that the ambient temperature exceeds 25°C, refer to the "Ambient Temp. Derating Curve" above and derate the load power.

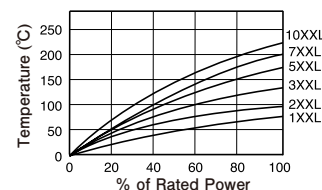
About Pulsed Load Power

Please refer to "How to select a wire-wound resistor at a short time overload"(Document #PDB101-2-1f). It is available by sending us a request form on our website.

Performance

Parameters	Test Condition	Specification
Dielectric Strength	AC1000V 1 min.	±(0.2%+0.05 Ω)
Insulation Resistance	DC500V	1000M Ω
Heat Resistance	270°C 2Hr	No Damage
Thermal Shock	Wattage Rating 30 min → In 8 to 12 seconds, -30°C 15 minr	±(2%+0.05 Ω)
Moiture Resistance	Temp. 40°C Moiture 95% 1/10×Wattage Rating (1.5Hr ON, 0.5Hr OFF) Repeat 500Hr	±(3%+0.05 Ω) 2.5M Ω MN
Short Time Overload	10×Wattage Rating 5sec	±(2%+0.05 Ω)
Load life	Wattage Rating 1.5Hr ON, 0.5Hr OFF 500Hr	±(5%+0.05 Ω)

Surface Temp. Versus Power Load



Precautions

Not suitable for cleaning with organic solvents. If you need a wash-resistant product, please contact our sales department.

How to order

10XXL 5.6 Ω J
 Type Resistance Tolerance

● Standard Resistance E- 24 Series J (±5%)

XXLN for non-inductive wire winding
 Order for a single piece accepted for any resistance value within the standard resistance range

