

Wirewound Resistors

Features :

- Wide resistance range: 0.1 Ω ~ 33 k Ω .
- Low cost, Excellent pulse load capability.
- Wide range of power ratings : 0.5W ~ 12W.
- Operating temperature Range : -40°C ~ 155°C.
- Products with Pb-free Terminations and RoHS compliant.

Applications :

- Consumer applications, Power tools, Ballast,
- Power supplies, Welders, High voltage applications, Home entertainment, appliances

Wirewound Resistors Out size :

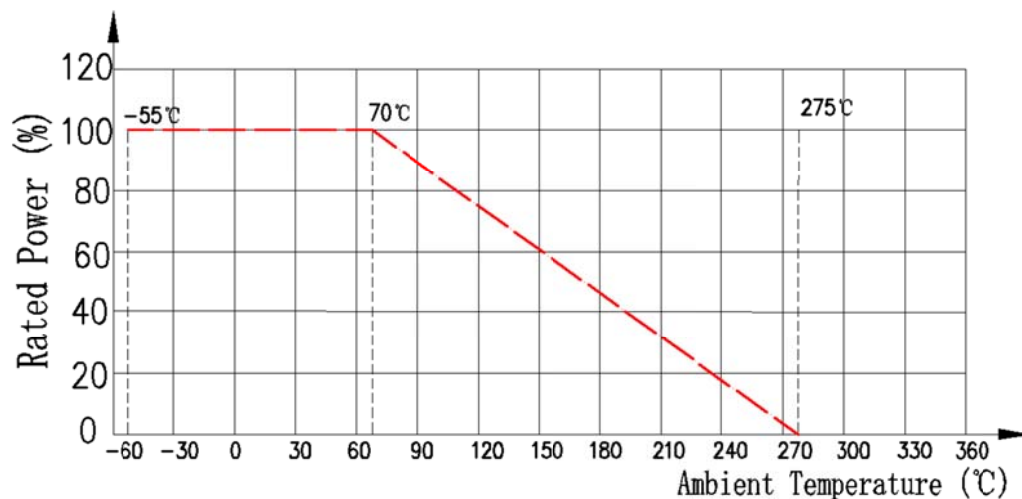


Type	Power(W)	Resistance (Ω)	Tolerance	Out Size(mm)			
				Dmax	Lmax	d	l
KNP	1/2W	0.1~510	$\pm 5\%$	3.5	10	≥ 0.35	25 ± 3
	1W	0.1~3K	$\pm 5\%$	3.5	12	≥ 0.35	
	2(3)W	0.1~5.1K	$\pm 5\%$	5	13.5	≥ 0.5	
	4(6)W	0.1~10K	$\pm 5\%$	7.5	23.5	≥ 0.5	
	8(10)W	0.1~33K	$\pm 5\%$	8.5	32.5	≥ 0.5	
	12W	0.1~33K	$\pm 5\%$	8.5	47	≥ 0.7	

Electrical Performance:

1. Rated power

The rated power indicates the maximum power the resistor can endure continuously when the ambient temperature is equal to or lower than 70°C. When the ambient temperature is higher than 70°C, the rated power of the resistor is determined by the derating curve described in the following figure.



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TEST ITEMS	SPECIFICATIONS	TEST METHODS(JIS5202)
Resistance Temp. Coeff. (TCR or α_r)	$R \geq 10\Omega$ $10\Omega > R > 5\Omega$ $R < 5\Omega$	$\pm 350\text{PPM}/^\circ\text{C}$ $\pm 500\text{PPM}/^\circ\text{C}$ Not
DC RESISTANCE	$\pm 5\%$ (J) ; $\pm 2\%$ (G) ; $\pm 1\%$ (F)	TA 25 $^\circ\text{C}$
Voltage Withstanding	NO EVIDENCE OF FLASHOVER MECHANICAL AMAGE , ARCING OF INSULATION BREAKDOWN	500VAC 1 min
INSULATION RESISTANCE	1000M Ω MIN	$R \geq 1\text{ G}\Omega$
HUMIDITY	$\Delta R \leq \pm (2\%R_0 + 0.1\Omega)$	40 $\pm 2^\circ\text{C}$, 95% RH, the place for 1000 hrs.
DAMP HEAT STEADY STATE	$\Delta R \leq \pm (5\%R_0 + 0.1\Omega)$	40 $\pm 2^\circ\text{C}$, 95% RH, the Rated DC Voltage test 1.5hrs, 0.5hrs to stop the place for 1000 hrs.
ENDURANCE AT 70 $^\circ\text{C}$	$\Delta R \leq \pm (5\%R_0 + 0.1\Omega)$	70 $^\circ\text{C}$ on ~ off cycle 1000 hrs.
ENDURANCE AT 25 $^\circ\text{C}$	$\Delta R \leq \pm (5\%R_0 + 0.1\Omega)$	25 $\pm 2^\circ\text{C}$ on ~ off cycle 1000 hrs.
Short Time Over load	$\Delta R \leq \pm (2\%R_0 + 0.05\Omega)$	10 times of rated wattage for 5 sec.
RESISTANCE TO SOLD HEAT	$\Delta R \leq \pm (1\%R_0 + 0.1\Omega)$	TEMPERATURE DIP TIME 350 $^\circ\text{C} \pm 10^\circ\text{C}$ 3.0 ± 0.5 SEC 260 $^\circ\text{C} \pm 5^\circ\text{C}$ 10 ± 1 SEC
SOLDERABILITY	95% COVERAGE MIN.	TEMPERATURE: 235 $\pm 5^\circ\text{C}$ at 2 ± 0.5 SEC
NON INFLAMMABILITY	Not Flamed	16 times of rated wattage for 5 min

Order Information:

L	-	KLS6	-	KNP	-	1/2W	-	10R	-	J	B
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RoHS	Wire	Power (W)	Resistance (Ω)		Tolerance (%)		Package	
	wound	1/2W	1R0	1 Ω	F	$\pm 1\%$	A	AMMO/Box
	Resistors	1W	10R	10 Ω	G	$\pm 2\%$	B	Bulk/Bags
		2W	100R	100 Ω	J	$\pm 5\%$		
		3W	1K	1000 Ω				
		5W						
		8W						
		12W						