

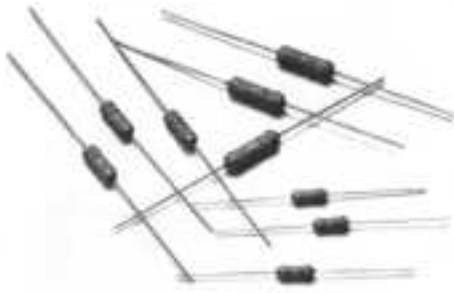
Wirewound Resistors

JARO COMPONENTS, INC. LEADED RESISTORS

FLAME-PROOF TYPE

Standard Type [KNP Series],

Non-Inductive Type [NKN Series]



FEATURES

Industry's Lowest Cost

Delivery From Stock in Bulk Taped, and Strip Pack

Exceptional Long-term Stability

Exceeds Carbon Comp MIL-R-11 Performance

Resistance Tolerance: $\pm 5\%$

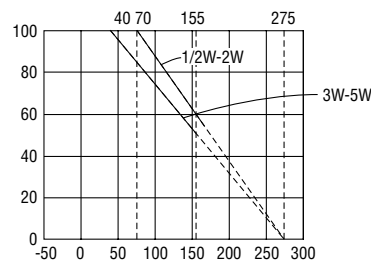
Variety of Packaging—Bulk, Strip Pack, 52mm Tape and Reel, Cut and Formed, or Radial Panasert/Aviisert

INTRODUCTION

- The resistor is fabricated using a suitable fiberglass or ceramic core with the resistance wire securely crimped to the terminals.
- Small in size comparatively than other kinds of resistors.
- Electrical and Mechanical stability and high reliability.
- The KNP/NKN series are coated with layers of green color flame-proof lacquer. The resistors meet overload tests in accordance with UL specification #1412 without producing a fire hazard.

DERATING CURVE

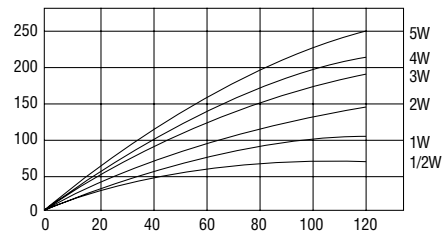
Rated Load (%)



Ambient Temperature (°C)

HOT-SPOT TEMPERATURE

Temperature Rise (°C)

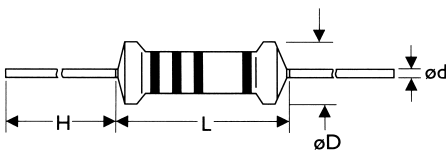


Rated Load (%)

Unit : mm

STYLE		DIMENSION			
Normal	Miniature	L	ϕD	H	ϕd
KNP05	KNP10M	9.0 \pm 1.0	3.5 \pm 0.5	26 \pm 2.0	0.6 \pm 0.05
KNP10	KNP20M	11.5 \pm 1.0	4.5 \pm 0.5	35 \pm 2.0	0.8 \pm 0.05
KNP20	KNP30M	15.5 \pm 1.0	5.0 \pm 0.5	33 \pm 2.0	0.8 \pm 0.05
KNP30	—	17.5 \pm 1.0	6.0 \pm 0.5	32 \pm 2.0	0.8 \pm 0.05
KNP40	KNP50M	17.5 \pm 1.0	6.0 \pm 0.5	32 \pm 2.0	0.8 \pm 0.05
KNP50	—	24.5 \pm 1.0	8.0 \pm 0.5	38 \pm 2.0	0.8 \pm 0.05

DIMENSIONS



KNP/NKN Series

ELECTRICAL CHARACTERISTICS

STYLE	KNP05	KNP10M	KNP10	KNP20M	KNP20	KNP30M	KNP30	KNP40	KNP50M	KNP50
Power Rating	1/2W	1W		2W		3W		4W	5W	
Operating Temp. Range	-55°C to +155°C									
Dielectric Withstanding Voltage	300V	300V	400V	400V	400V	400V	400V	400V	400V	400V
Value Range ±5%	0.1Ω~47Ω		0.1Ω~100Ω		0.1Ω~330Ω		0.1Ω~560Ω		0.1Ω~1KΩ	
Temperature Coefficient	±400ppm/°C									

* 1. Standard resistance is as the above list, below or over this resistance on request.

* 2. Non-Inductive type up to 50Ω only.

ENVIRONMENTAL CHARACTERISTICS

PERFORMANCE TEST	TEST METHOD	APPRaise
Short Time Overload	JIS-C-5202 5.5	2.5 Times RCWV for 5 Seconds ±(2%+0.05Ω)
Dielectric Withstanding Voltage	JIS-C-5202 5.7	in V-Block for 60 Seconds by Type
Temperature Coefficient of Resistance	JIS-C-5202 5.2	-55°C to +155°C ±400ppm/°C
Insulation Resistance	JIS-C-5202 5.6	in V-Block >100MΩ
Solderability	JIS-C-5202 6.5	235°C for 5±0.5 Seconds 95% Min. Coverage
Resistance to Solvent	JIS-C-5202 6.9	Trichroethane for 1 Min. with Ultrasonic No Deterioration of Coatings and Markings
Terminal Strength	Direct load for 10 Sec. in The Direction of The Terminal Leads ≥2.5kg (24.5N)	
Load Life in Humidity	JIS-C-5202 7.9	40±2°C, 90~95% RH at RCWV for 1000 Hrs. (1.5 Hrs. on , 0.5 Hrs. off) ±(3%+0.05Ω)
Load Life	JIS-C-5202 7.10	70°C at RCWV for 1000 Hrs. (1.5 Hrs. on , 0.5 Hrs. off) ±(3%+0.05Ω)

* Rated Continuous Working Voltage (RCWV)=√Power Rating x Resistance Value