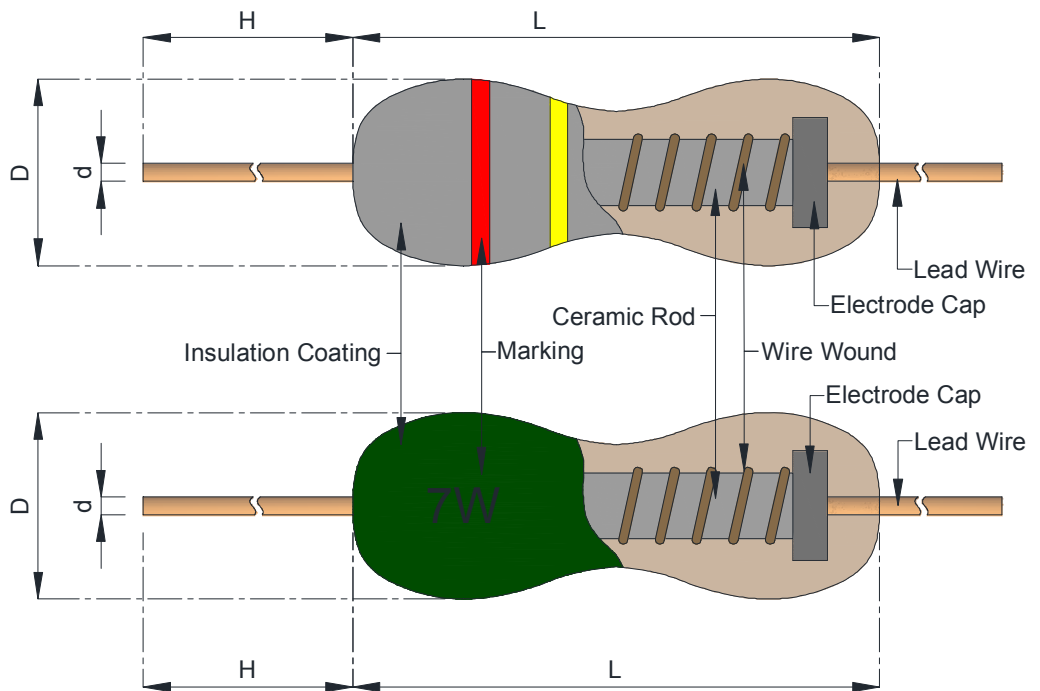


● PRODUCT FEATURES :

- ⊙ Super heat dissipation ; Small linear temperature coefficient
- ⊙ Instant overload capability ; Low noise figure and without annual shift on resistance value
- ⊙ Complete flameproof construction UL-1412
- ⊙ Value Range、 $\pm 5\%$ 、 $\pm 2\%$ 、 $\pm 1\%$
- ⊙ RoHS compliant

● Power ratings Dimensions

1/2W 1WS  
 1W 2WS  
 2W 3WS  
 3W 5WS  
 5W 7WS



7W 10WS  
 10W 12WS  
 15W

- ⊙ Standard Type: 1/2W ~15W
- ⊙ Miniature Type: 1/Ws~12Ws

● Dimensions

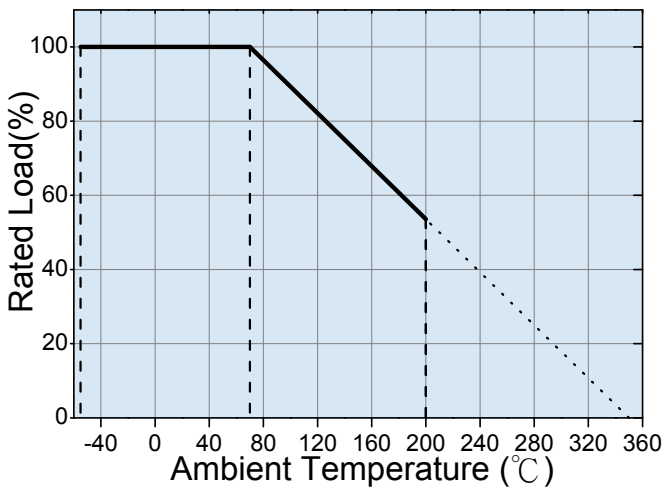
STYLE		DIMENSIONS(mm)				Value Range
Normal	Miniature	L	D	H	d	
KNP-1/2W	KNP1Ws	9.0±0.5	3.2±0.5	26±2.0	0.65±0.03	0.01 Ω ~ 150 Ω
KNP-1W	KNP2Ws	11.5±1.0	4.5±0.5	35±2.0	0.78±0.03	0.01 Ω ~ 470 Ω
KNP-2W	KNP3Ws	15.5±1.0	5.0±0.5	32±2.0	0.78±0.03	0.01 Ω ~ 470 Ω
KNP-3W	KNP5Ws	17.5±1.0	6.0±0.5	32±2.0	0.78±0.03	0.01 Ω ~ 470 Ω
KNP-5W	KNP7Ws	24.5±1.0	8.0±0.5	38±2.0	0.78±0.03	0.01 Ω ~ 560 Ω
KNP-7W	KNP10Ws	40.0±1.0	8.0±0.5	35±2.0	0.78±0.03	0.01 Ω ~ 560 Ω
KNP-10W	KNP12Ws	53.0±1.0	8.0±0.5	35±2.0	0.78±0.03	0.01 Ω ~ 560 Ω
KNP-15W		66.0±1.0	8.0±0.5	35±2.0	0.78±0.03	0.01 Ω ~ 500 Ω

- ★ Value Range for standard resistance , below or over this resistance on request
- ★ Non-inductive type up 50 Ω only

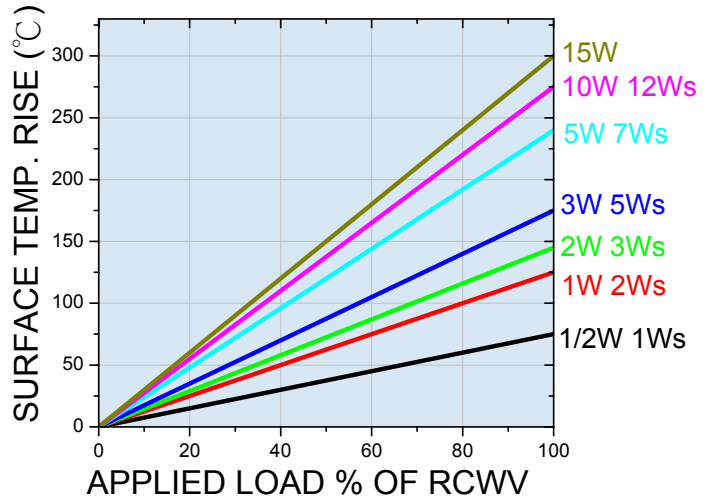
● ELECTRICAL CHARACTERISTICS

STYLE	KNP-1/2W	KNP-1W	KNP-2W	KNP-3W	KNP-5W	KNP-7W	KNP-10W	KNP-15W
	KNP-1WS	KNP-2WS	KNP-3WS	KNP-5WS	KNP-7WS	KNP-10WS	KNP-12WS	
Body Size	9.0*3.2	11.5*4.5	15.5*5.0	17.5*6.0	24.5*8.0	40.0*8.0	83.0*8.0	66.0*8.0
Operating Temp. Range	-55°C to +350°C							
Resistance Temp. Coeff.	±400PPM/°C							
Dielectric Withstanding volt.	300V			400V				

●POWER GRAPH



●HOT-SPOT TEMPERATURE



● ENVIRONMENTAL CHARACTERISTICS

PERFORMANCE TEST	TEST METHOD	APPRAISE
SHORT TIME OVERLOAD	Rated power x 10 for 5 seconds	±(2%+0.05Ω)
TEMPERATURE COEFFICIENT	Resistance value at room Temperature and room Temperature+100°C	By Type
DIELECTRIC WITHSTANDING VOLTAGE	In V-Block for 60 seconds	By Type
INSULATION RESISTANCE	In V-Block	> 100MΩ
LOAD LIFE	70°C at RCWV for1000hrs.(1.5hrs. on , 0.5hrs.off)	±(5%+0.05Ω)
LOAD LIFE IN HUMIDITY	40±2°C 90~95%RH at RCWV for1000hrs. (1.5hrs. on , 0.5hrs.off)	±(5%+0.05Ω)
SOLDER ABILITY	260±5°C for 2±0.5 seconds	95% min. coverage
TERMINAL STRENGTH	Direct load for 10 sec. In the direction off the terminal leads.	Tensile: ≥2.5kg

Reference Standards: IEC 60115-1

Storage Temperature: 25±3°C; Humidity < 80%RH

★ Rated continuous Working Voltage (RCWV) =  $\sqrt{POWER RATING * RESISTANCE VALUE}$

- Resistor body color
  - ⊙ Normal size----- Grey
  - ⊙ Small size-----Pink
  - ⊙ Up the 7W-----Green

● PART NUMBER:

KNP		1/4W		0R3		J		TB	
↓		↓		↓		↓		↓	
Type		Power rating		Resistance		J		Packaging	
KNP	Wire Wound	KNP-1/2W	KNP1Ws	0R3	0.3Ω	F	± 1%	TB	Taping Box
NKNP	Non Inductive	KNP-1W	KNP2Ws	10R	10Ω	G	± 2%	TR	Taping Reel
		KNP-2W	KNP3Ws	100R	100Ω	J	± 5%	BU	Bulk
		KNP-3W	KNP5Ws					F	F-TYPE
		KNP-5W	KNP7Ws					M	M-TYPE
		KNP-7W	KNP10Ws					PANA	PANA
		KNP-10W	KNP12Ws						
		KNP15W	KNP20WS						