

**FEATURE**

- ◆ Small size and low cost.
- ◆ Super heat dissipation, instant overload capability
- ◆ Flameproof coating.
- ◆ Standard Tolerance: ±5% (available ±1% ,±5%).
- ◆ Standard Value: E24 series as range below.
- ◆ Color band marking
- ◆ Body Color: Gray.
- ◆ Available in non-inductive style (As KNP type)
- ◆ Miniature size available (As KNP-S type)

Figure



Fig-1

**ORDERING**

Example: KNP100A101JB (1W 100R ±5%)

Type	Power	Forming	Resistance	Tolerance	Package
KNP050	1/2W	A=Axial	R100 =0.1Ω	F = ±1%	T = T/Box
KNP100S	1WS	O=Others	1R0 =1Ω	G = ±2%	B = Bulk
KNP100	1W		100 =10Ω	J = ±5%	R = Reel
KNP200S	2WS		101 =100Ω	K = ±10%	
KNP200	2W		102 =1KΩ		
KNP300S	3WS		103 =10KΩ		
KNP300	3W		104 =100KΩ		
KNP400	4W		105 =1MΩ		
KNP500S	5WS				
KNP500	5W				
KNP700	7W				
KNP10W	10W				
KNP15W	15W				

**GENERAL SPECIFICATION**

Type	Power	Resistance Range		Package	Type	Power	Resistance Range		Package
		Standard	Maximum				Standard	Maximum	
KNP050	1/2W	0.1 ~ 80Ω	330Ω	Tape Box	KNP700	7W	1 ~ 470Ω	3.3KΩ	Bulk
KNP100S	1WS	0.1 ~ 80Ω	330Ω	Tape Box	KNP10W	10W	2 ~ 1KΩ	4.7KΩ	Bulk
KNP100	1W	0.1 ~ 100Ω	1.5KΩ	Tape Box	KNP15W	15W	2 ~ 1K5Ω	4.7KΩ	Bulk
KNP200S	2WS	0.1 ~ 100Ω	1.5KΩ	Tape Box					
KNP200	2W	0.1 ~ 100Ω	2.2KΩ	Tape Box					
KNP300S	3WS	0.1 ~ 100Ω	2.2KΩ	Tape Box					
KNP300	3W	0.1 ~ 150Ω	3.3KΩ	Tape Box					
KNP400	4W	0.1 ~ 150Ω	3.3KΩ	Tape Box					
KNP500S	5WS	0.1 ~ 150Ω	3.3KΩ	Tape Box					
KNP500	5W	0.1 ~ 150Ω	4.3KΩ	Tape Box					

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


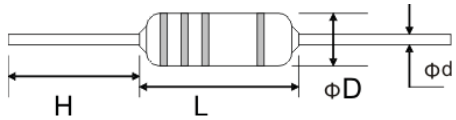
CHARACTERISTIC	0.5W~5W	7W~15W
Temperature coefficient	±300ppm	±250ppm
Insulation resistance	10,000M Ω Min.	
Load Life (1000 hours)	<±5% +0.05Ω	
Shorttime overload	<±2% +0.05Ω	
Temperature Cycling	<±1% +0.05Ω	
Moisture Resistance\	<±5% +0.05Ω	
Shock & Vibration	<±1% +0.05Ω	
Effect of Sodering	<±2% +0.05Ω	
Working temperature range	-55 ~ +155°C	

**MATERIAL**

- ◆ Core: High purity ceramic Al<sub>2</sub>O<sub>3</sub>.
- ◆ Element: Alloy Resistance Wire
- ◆ Termination: Standard solder-plated cooper lead
- ◆ Coating: Gray silicone.



□ DIMENSION

Type	Dimensions (mm)				Power	Figure
	L	ΦD	Φd	H		
KNP050	9.0±1.0	3.2±0.5	0.6±0.02	28±3.0	1/2W	 Fig-2  Fig-3
KNP100S	9.0±1.0	3.2±0.5	0.6±0.02	28±3.0	1WS	
KNP100	11.0±1.0	4.5±1.0	0.8±0.02	35±3.0	1W	
KNP200S	11.0±1.0	4.5±1.0	0.8±0.02	35±3.0	2WS	
KNP200	15.0±1.0	5.0±1.0	0.8±0.02	35±3.0	2W	
KNP300S	15.0±1.0	5.0±1.0	0.8±0.02	35±3.0	3WS	
KNP300	17.0±1.0	6.0±1.0	0.8±0.02	38±3.0	3W	
KNP400	17.0±1.0	6.0±1.0	0.8±0.02	38±3.0	4W	
KNP500S	17.0±1.0	6.0±1.0	0.8±0.02	38±3.0	5WS	
KNP500	25.0±1.0	8.0±1.0	0.8±0.02	38±3.0	5W	
KNP700	30.0±1.0	8.0±1.0	0.8±0.02	38±3.0	7W	
KNP10W	42.0±1.0	8.0±1.0	0.8±0.02	38±3.0	10W	
KNP15W	53.0±1.0	8.0±1.0	0.8±0.02	38±3.0	15W	

◆ Derating Curve

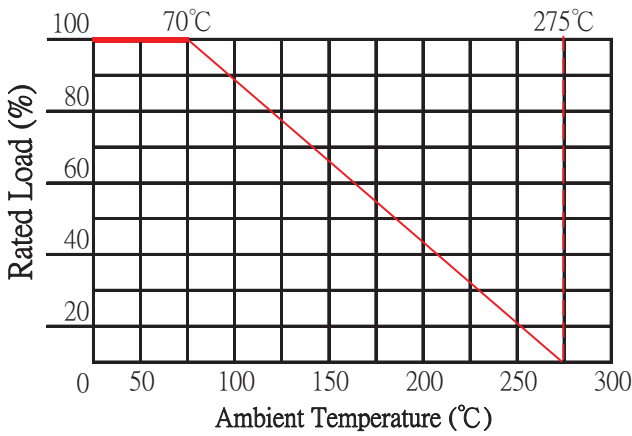


Fig-4

◆ Temperature Rise (0.5W ~ 5W)

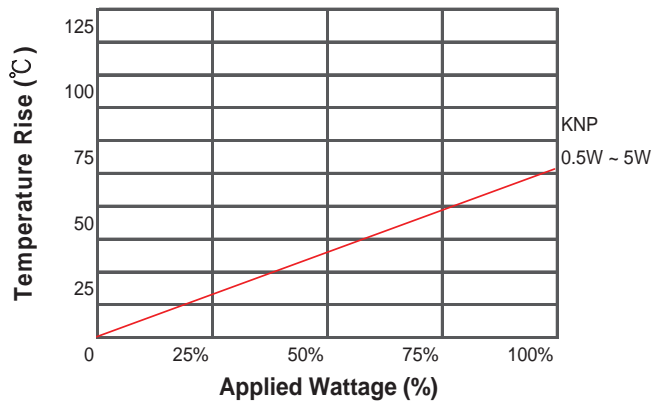


Fig-5

◆ Temperature Rise (7W ~ 15W)

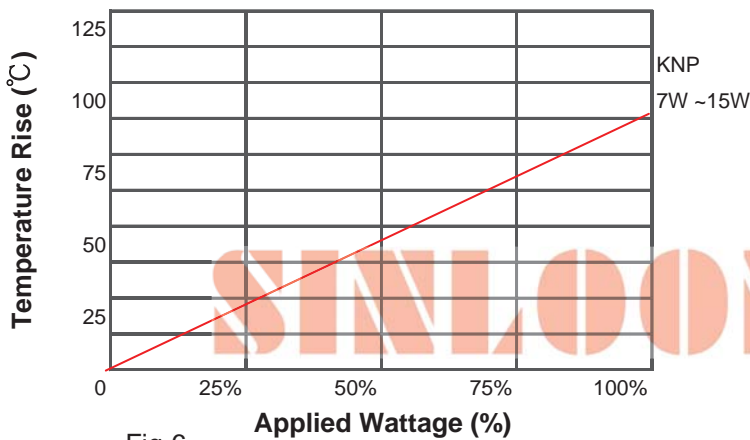


Fig-6

**SINLOON®**

繞線電阻

Power: 1/2W ~ 15W

KNP Series

Wire Wound Resistor (0.5W ~ 15W)

☐ PACKAGE

Type	Power	Inner Box Size			QUANTITY		Carbon Package	Weight (KG)
		L	W	H	Type Box	Bulk Bag		
KNP050	1/2W	264	80	75	5000	1000		
KNP100S	1WS	264	80	75	2500	1000		
KNP100	1W	265	103	82	2500	1000		
KNP200S	2WS	265	103	82	2500	1000		
KNP200	2W	265	103	96	1000	500		
KNP300S	3WS	265	103	96	1000	500		
KNP300	3W	270	105	75	1000	200		
KNP400	4W	270	105	75	1000	1000		
KNP500S	5WS	270	105	75	1000	1000		
KNP500	5W	270	115	75	500	1000		
KNP700	7W	270	115	75	500	1000		
KNP10W	10W					500		
KNP15W	15W					500		

Inner Box

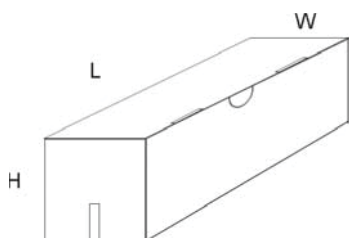
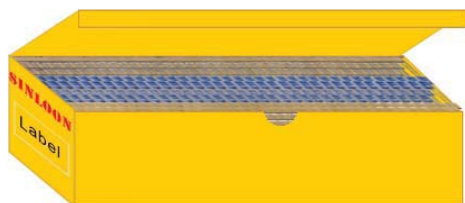


Fig-7



Bulk Package Box

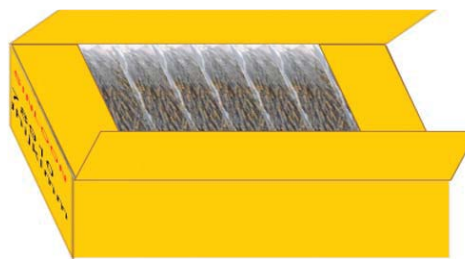


Fig-8

Carbon



Fig-9

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※Mayloon characteristic parameters of electronic product specification changes or updates without prior notice.



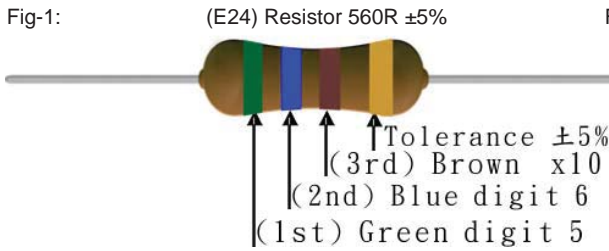
**SINLOON® 繞線電阻**  
Power: 1/2W ~ 15W

**KNP Series**  
Wire Wound Resistor (0.5W ~ 15W)

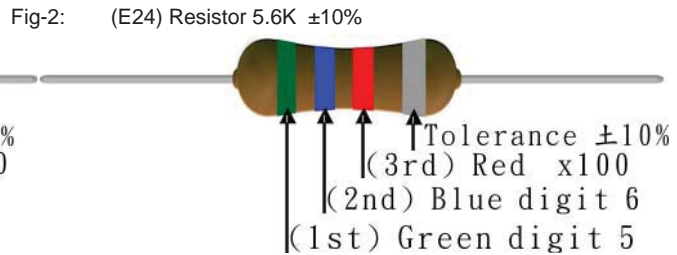
□ **Standard Resistor Color Code ( 4 band code)**

Color	Black	Brown	Red	Orange	Yellow	Green	Blue	Violet	Gray	White	Gold	Silver
1st digit	0	1	2	3	4	5	6	7	8	9		
2nd digit	0	1	2	3	4	5	6	7	8	9		
Multiplier	x10 <sup>0</sup>	x10 <sup>1</sup>	x10 <sup>2</sup>	x10 <sup>3</sup>	x10 <sup>4</sup>	x10 <sup>5</sup>	x10 <sup>6</sup>	x10 <sup>7</sup>	x10 <sup>8</sup>	x10 <sup>9</sup>		
Tolerance		±1% (F)	±2% (G)			±0.5% (D)	±0.25% (C)	±0.1% (B)			±5% (J)	±10% (K)

□ **Examples:**



Green, Blue, brown, silver tolerance band:  
56 x 10 = 560 ohms (560 ohms), with a tolerance of ±5%



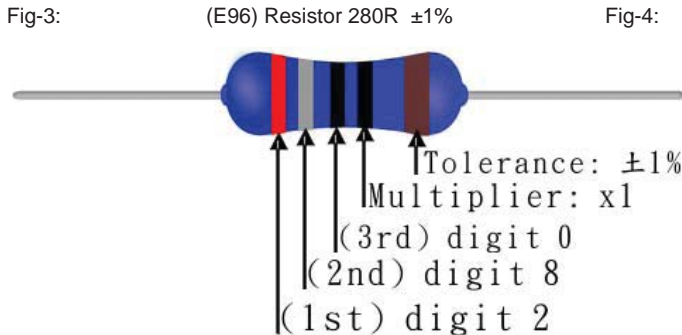
Green, blue, red, with silver tolerance band:  
56 x 100 = 5.6 kohms, with a tolerance of ±10%

□ **Standard EIA Decade Resistor Value E24 series: ( ±5% tolerance)**

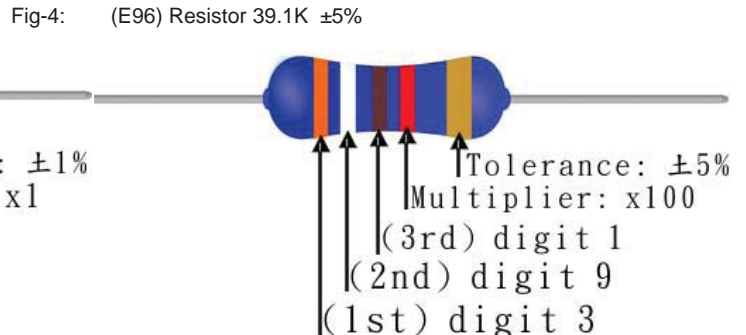
10, 11, 12, 13, 15, 16, 18, 20, 22, 24, 27, 30, 33, 36, 39, 43, 47, 51, 56, 62, 68, 75, 82, 91

□ **Standard Resistor Color Code ( 5 band code)**

Color	Black	Brown	Red	Orange	Yellow	Green	Blue	Violet	Gray	White	Gold	Silver
1st digit	0	1	2	3	4	5	6	7	8	9		
2nd digit	0	1	2	3	4	5	6	7	8	9		
3rd digit	0	1	2	3	4	5	6	7	8	9		
4th digit	x10 <sup>0</sup>	x10 <sup>1</sup>	x10 <sup>2</sup>	x10 <sup>3</sup>	x10 <sup>4</sup>	x10 <sup>5</sup>	x10 <sup>6</sup>	x10 <sup>7</sup>	x10 <sup>8</sup>	x10 <sup>9</sup>		
Tolerance		±1% (F)	±2% (G)			±0.5% (D)	±0.25% (C)	±0.1% (B)			±5% (J)	±10% (K)



Red, Gray, Black, Black, Brown tolerance band:  
280 x 1 = 280 ohms (280 ohms), with a tolerance of ±1%



Orange, White, Brown, Red, Gold tolerance band:  
390 x 100 = 39.1K ohms (39.1K ohms),  
with a tolerance of ±5%

E96 series: (±1% tolerance)

100, 102, 105, 107, 110, 113, 115, 118, 121, 124, 127, 130, 133, 137, 140, 143, 147, 150, 154, 158, 162, 165, 169, 174, 178, 182, 187, 191, 196, 200, 205, 210, 215, 221, 226, 232, 237, 243, 249, 255, 261, 267, 274, 280, 287, 294, 301, 309, 316, 324, 332, 340, 348, 357, 365, 374, 383, 392, 402, 412, 422, 432, 442, 453, 464, 475, 487, 491, 511, 523, 536, 549, 562, 576, 590, 604, 619, 634, 649, 665, 681, 698, 715, 732, 750, 768, 787, 806, 825, 845, 866, 887, 909, 931, 959, 976

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