

# Wire-Wound Fixed Resistors

## Performance Specification

Temperature Coefficient	<20Ω: ±400PPM/°C; ≥20Ω: ±300PPM/°C
Short Time Overload	±(2.0% + 0.05Ω)Max, with no evidence of mechanical damage.
Dielectric Withstanding Voltage	No evidence of flashover, mechanical damage, arcing or insulation breakdown.
Pulse Overload	±(5.0% + 0.05Ω)Max, with no evidence of mechanical damage.
Terminal Strength	No evidence of mechanical damage.
Resistance to Soldering Heat	±(1.0% + 0.05Ω)Max, with no evidence of mechanical damage.
Solderability	Min. 95% coverage.
Temperature Cycling	±(2.0% + 0.05Ω)Max, with no evidence of mechanical damage.
Load Life in Humidity	±(5.0% + 0.05Ω)Max, with no evidence of mechanical damage.
Load Life	±(5.0% + 0.05Ω)Max, with no evidence of mechanical damage.
Non-Flame	No evidence of flaming or arcing.
Surge Immunity (IEC 61000-4-5)	±(5.0% + 0.05Ω)Max

## Ordering Procedure: Ex.: KNP 1W, +/-5%, 100Ω , T/B-1000

K	N	P	0	1	W	J	0	1	0	1	A	1	0
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**Type:**  
KNP = KNP  
KNH = KNH  
KNS = KNS

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**Feature:**  
0 = Standard  
U = UL Approved   
A = Anti-Surge  
S = Special / Customized (For KNP Type only)  
I = Non-Inductive

**Wattage:**  
Normal  
W2 = 1/2W  
1W = 1W  
.. ..  
9W = 9W  
AW = 10W  
.. ..  
A0 = 100W

Small  
1S = 1W-S  
.. ..  
9S = 9W-S  
AS = 10W-S

Extra Small  
1U = 1W-SS  
2U = 2W-SS  
3U = 3W-SS  
4U = 4W-SS  
AU = 10W-SS

**Resistance Value:**

- E-24 series:  
1<sup>st</sup> digit is "0"  
2<sup>nd</sup> & 3<sup>rd</sup> digits are significant figures of the resistance  
4<sup>th</sup> indicates the number of zeros  
"J" ~ 0.1, "K" ~ 0.01  
Ex. 4.7Ω ~ 47J, 4.7KΩ ~ 472
- E-96 series:  
1<sup>st</sup> to 3<sup>rd</sup> digits are significant figures of the resistance and the 4<sup>th</sup> digit indicates the number of zeros.  
Ex.: 1.33KΩ = 1331

**Packing Type:**  
A = Tape/Box  
T = Tape/Reel  
B = Bulk/Box

**Packing Qty:**  
1 = 1,000 pcs.  
2 = 2,000 pcs.  
A = 500 pcs.  
B = 2,500 pcs. (for T/R)  
0 = Bulk/Box

**Additional Information:**  
(for KNP,KNS,KNH,KNHA Type B/B pack only)  
0 = NIL

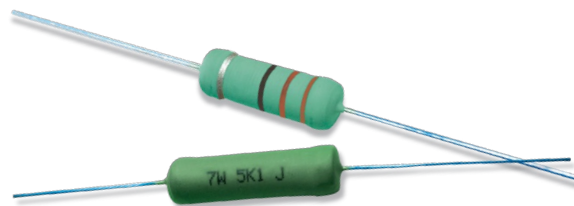
(for KNP Type Only)  
0 = PT-52mm  
8 = PT-58mm  
9 = PT-64mm  
C = PT-73mm

**Tolerance:**  
F = ±1%  
G = ±2%  
J = ±5%  
K = ±10%

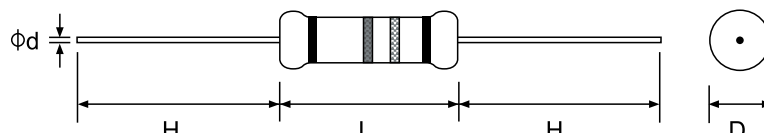
## Wire-Wound Fixed Resistors

### Features

- Color coating Is "Green"
- Non-inductive type available
- Excellent flame resistance
- Too low or too high ohmic value can be supplied on a case to case basis
- Special Fusing Wire-Wound Resistors can be supplied on a case to case basis



Standard : 2% ,5% ,10% -- E - 24 series  
1% -- E - 96 series



Part No.	Style	Power Rating at 70°C	Dimension (mm)					Low Resistance Range	Standard Resistance Range	High Resistance Range
			D±1	L±1	H±3	d±0.05	PT			
<b>Normal Size</b>										
KNP0W2	KNP 50	1/2W (0.50W)	3.5	10.0	28	0.54	52	0.06Ω~9.9Ω	10Ω~39Ω	40Ω~560Ω
KNP01W	KNP 100	1W	5.0	12.0	25	0.70	52	0.10Ω~9.9Ω	10Ω~50Ω	51Ω~1KΩ
KNP02W	KNP 200	2W	5.5	16.0	28	0.70	64	0.15Ω~9.9Ω	10Ω~120Ω	121Ω~2KΩ
KNP03W	KNP 300	3W	6.5	17.5	28	0.75	64	0.25Ω~9.9Ω	10Ω~200Ω	201Ω~3KΩ
KNP05W	KNP 500	5W	8.5	25	38	0.75	B/B	0.50Ω~9.9Ω	10Ω~470Ω	471Ω~5KΩ
KNP07W	KNP 700	7W	8.5	30	38	0.75	B/B	0.65Ω~9.9Ω	10Ω~470Ω	471Ω~6KΩ
KNP08W	KNP 800	8W	8.5	40	38	0.75	B/B	1.0Ω~9.9Ω	10Ω~1.5KΩ	1.6KΩ~10KΩ
KNP09W	KNP 900	9W	8.5	53	38	0.75	B/B	1.0Ω~9.9Ω	10Ω~1.5KΩ	1.6KΩ~15KΩ
<b>Small Size</b>										
KNP01S	KNP 100-S	1W	3.5	10.0	28	0.54	52	0.06Ω~9.9Ω	10Ω~39Ω	40Ω~560Ω
KNP02S	KNP 200-S	2W	5.0	12.0	25	0.70	52	0.10Ω~9.9Ω	10Ω~50Ω	51Ω~1KΩ
KNP03S	KNP 300-S	3W	5.5	16.0	28	0.70	64	0.15Ω~9.9Ω	10Ω~120Ω	121Ω~2KΩ
KNP05S	KNP 500-S	5W	6.5	17.5	28	0.75	64	0.25Ω~9.9Ω	10Ω~200Ω	201Ω~3KΩ
KNP07S	KNP 700-S	7W	8.5	25	38	0.75	B/B	0.50Ω~9.9Ω	10Ω~470Ω	471Ω~5KΩ
KNP08S	KNP 800-S	8W	8.5	30	38	0.75	B/B	0.65Ω~9.9Ω	10Ω~470Ω	471Ω~6KΩ
KNP09S	KNP 900-S	9W	8.5	40	38	0.75	B/B	1.0Ω~9.9Ω	10Ω~1.5KΩ	1.6KΩ~10KΩ
KNP0AS	KNP 1000-S	10W	8.5	53	38	0.75	B/B	1.0Ω~9.9Ω	10Ω~1.5KΩ	1.6KΩ~15KΩ
<b>Extra Size</b>										
KNP01U	KNP 100-SS	1W	3.0	9.0	28	0.54	52	0.10Ω~9.9Ω	10Ω~39Ω	40Ω~180Ω
KNP02U	KNP 200-SS	2W	3.5	10.0	28	0.54	52	0.10Ω~9.9Ω	10Ω~39Ω	40Ω~220Ω
KNP03U	KNP 300-SS	3W	5.5	13.5	28	0.70	64	0.20Ω~9.9Ω	10Ω~50Ω	51Ω~620Ω
KNP04U	KNP 400-SS	4W	5.5	16.0	28	0.70	64	0.20Ω~9.9Ω	10Ω~120Ω	121Ω~750Ω
KNP0AU	KNP 1000-SS	10W	8.5	40	38	0.75	B/B	1.0Ω~9.9Ω	10Ω~1.5KΩ	1.6KΩ~5KΩ

Note: For KNP Series Max. Working Voltage: 500V  
 Max. Overload Voltage: 1,000V  
 Dielectric Withstanding Voltage : Dimension ≤ 3.5 x 10 : 350V  
 > 3.5 x 10 : 500V

