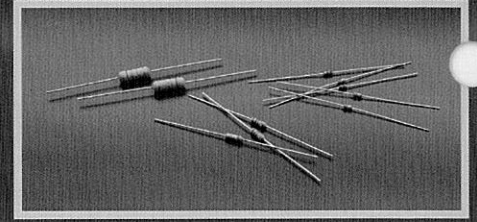
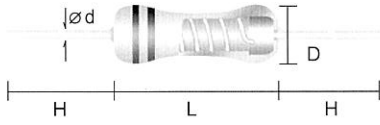


# WIRE – WOUND FIXED RESISTORS

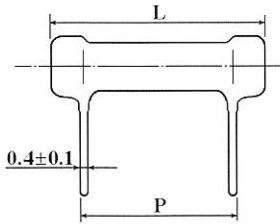
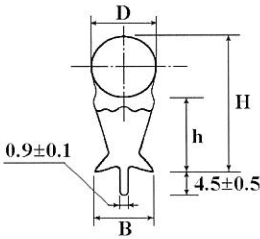


## Feature:

- Excellent flame resistance
- Green body color
- Too low or high ohmic value can be supplied on a case to case basis



## KNS Type



## Specifications

### Normal Size

Part No.	Type	Power Rating At 70°C	Dimension (mm)				Resistance Range
			D ± 1	L Max.	d +0.02 -0.05	H ± 3	
KNP0W2	KNP-50	1/2W	4	10	0.7	28	0.1Ω ~ 39Ω
KNP01W	KNP-100	1W	5	12	0.7	28	0.1Ω ~ 50Ω
KNP02W	KNP-200	2W	5.5	16	0.8	28	0.1Ω ~ 120Ω
KNP03W	KNP-300	3W	6.5	17.5	0.8	28	0.1Ω ~ 200Ω
KNP05W	KNP-500	5W	8.5	26	0.8	38	0.5Ω ~ 470Ω
KNP07W	KNP-700	7W	8.5	32	0.8	38	0.5Ω ~ 470Ω
KNP08W	KNP-800	8W	8.5	41	0.8	38	1Ω ~ 1.5KΩ
KNP09W	KNP-900	9W	8.5	54	0.8	38	1Ω ~ 1.5KΩ

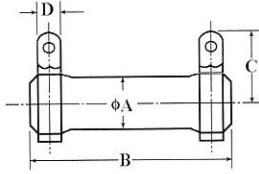
### Small Size

Part No.	Type	Power Rating At 70°C	Dimension (mm)				Resistance Range
			D ± 1	L Max.	d +0.02 -0.05	H ± 3	
KNP01S	KNP-100-S	1W	4	10	0.7	28	0.1Ω ~ 39Ω
KNP02S	KNP-200-S	2W	5	12	0.7	28	0.1Ω ~ 50Ω
KNP03S	KNP-300-S	3W	5.5	16	0.8	28	0.1Ω ~ 120Ω
KNP05S	KNP-500-S	5W	6.5	17.5	0.8	28	0.1Ω ~ 200Ω
KNP07S	KNP-700-S	7W	8.5	26	0.8	38	0.5Ω ~ 470Ω
KNP08S	KNP-800-S	8W	8.5	32	0.8	38	0.5Ω ~ 470Ω
KNP09S	KNP-900-S	9W	8.5	41	0.8	38	1Ω ~ 1.5KΩ
KNP0AS	KNP-1000-S	10W	8.5	54	0.8	38	1Ω ~ 1.5KΩ

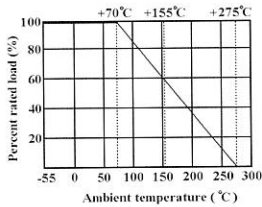
Part No.	Type	Power Rating At 70°C	Dimension (mm)						Resistance Range
			D Max.	L ± 1.5	P ± 1	H ± 1	h ± 1	B ± 0.5	
KNS02W	KNS-200	2W	8	19	8	19	12	4.5	0.1Ω ~ 50Ω
KNS03W	KNS-300	3W	8	21	10	19	13	4.5	0.5Ω ~ 50Ω
KNS05W	KNS-500	5W	10	26	15	21.5	13	6	0.5Ω ~ 100Ω
KNS07W	KNS-700	7W	10	31	20	21.5	13	6	1Ω ~ 1KΩ
KNS08W	KNS-800	8W	10	41	30	21.5	13	6	1Ω ~ 1.5KΩ
KNS0AW	KNS-1000	10W	10	54	43	21.5	13	6	1Ω ~ 2KΩ

# WIRE – WOUND FIXED RESISTORS

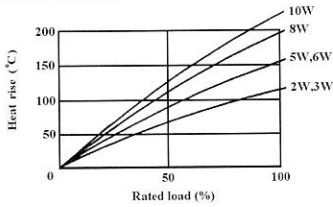
## KNH Type



## Derating Curve



## Heat Rise Chart



Part No.	Type	Power Rating At 70°C	Dimension (mm)				Resistance Range
			A ± 1.5	B ± 1.5	C ± 3	D ± 5	
KNH020	KNH-20W	20W	19	50	19	4.5	0.4Ω ~ 1KΩ
KNH030	KNH-30W	30W	19	75	19	4.5	0.5Ω ~ 3KΩ
KNH040	KNH-40W	40W	19	90	19	4.5	0.6Ω ~ 5KΩ
KNH050	KNH-50W	50W	28	75	31	8	3Ω ~ 10KΩ
KNH060	KNH-60W	60W	28	90	31	8	3Ω ~ 15KΩ
KNH080	KNH-80W	80W	28	115	31	8	3Ω ~ 20KΩ
KNH100	KNH-100W	100W	28	140	31	8	3Ω ~ 30KΩ

## Performance Specifications

Temperature coefficient	≥20Ω: ±300PPM/°C; <20Ω: ±400PPM/°C
Short-time overload	ΔR/R ≤ ±(2%+0.05Ω), with no evidence of mechanical damage
Terminal strength	No evidence of mechanical damage
Resistance to soldering heat	ΔR/R ≤ ±(1%+0.05Ω), with no evidence of mechanical damage
Solderability	Min. 95% coverage.
Load life in humidity	ΔR/R ≤ ±(5%+0.05Ω), with no evidence of mechanical damage
Load life	ΔR/R ≤ ±(5%+0.05Ω), with no evidence of mechanical damage

## Ordering Procedure (Example: KNP 3W-S 5% 12 Ω T/B-1000)

**KNP03SJ0120A10**

Additional Information: 0 = NIL

Packing Quantity: 1 = 1,000pcs, A = 500pcs, B = 2,500pcs, 0 = for Bulk/Box packing

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

Resistance Value: E-24 series – The 1<sup>st</sup> digit is "0"; the 2<sup>nd</sup> & 3<sup>rd</sup> digits are for the significant figures of the resistance and the 4<sup>th</sup> digit indicate the numbers of zeros following

Tolerance: G = ±2%, J = ±5%, K = ±10%

Wattage: Normal size – 1W = 1W, 2W = 2W, 3W = 3W, 5W = 5W, 7W = 7W, 8W = 8W, 9W = 9W, AW = 10W, 20 = 20W, 30 = 30W, 40 = 40W, 50 = 50W, 60 = 60W, 80 = 80W

Small size – 1S = 1W-S, 2S = 2W-S, 3S = 3W-S, 5S = 5W-S, 7S = 7W-S, 8S = 8W-S, 9S = 9W-S, AS = 10W-S

\*\*\* 00 = for power rating over 100W. Please indicate the power rating at the last 3 digits of the part no. (B/B Only)

Special Features: 0 = Standard product, I = Non-Inductive product

Product Type: KNP = KNP Type, KNS = KNS Type, KNH = KNH Type