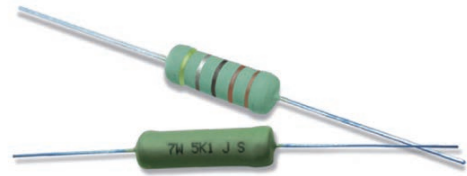


## Feature

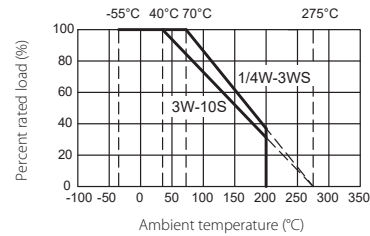
- Excellent flame retardant coating
- Too low or too high ohmic value can be supplied on a case to basis
- Non-inductive type available



## Dimension (mm)



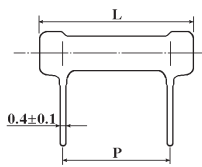
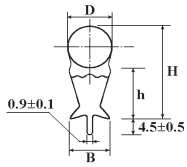
## Derating Curve



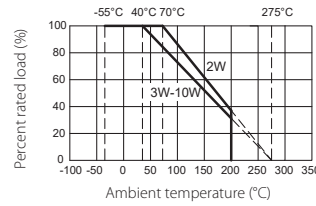
## Specification

Part No	Type	Power Rating 70°C	Dimension (mm)					Resistance Range
			D±1	L±1	d±0.05	H±3	PT	
KNP0W4	KNP-25	1/4W	2.5	6.5	0.54	28	52	0.01Ω~200Ω
KNP0S2	KNP-50-S	1/2WS	2.5	6.5	0.54	28	52	0.01Ω~200Ω
KNP0W2	KNP-50	1/2W	3.0	9.5	0.54	28	52	0.01Ω~390Ω
KNP01S	KNP-100-S	1W-S	3.0	9.5	0.54	28	52	0.01Ω~390Ω
KNP01W	KNP-100	1W	4.5	11.5	0.70	25	52	0.01Ω~1.2KΩ
KNP02S	KNP-200-S	2W-S	4.5	11.5	0.70	25	52	0.01Ω~1.2KΩ
KNP02W	KNP-200	2W	5.5	15.5	0.70	28	64	0.01Ω~3.0KΩ
KNP03S	KNP-300-S	3W-S	5.5	15.5	0.70	28	64	0.01Ω~3.0KΩ
KNP03W	KNP-300	3W	6.5	17.5	0.75	28	64	0.039Ω~3.9KΩ
KNP05S	KNP-500-S	5W-S	6.5	17.5	0.75	28	64	0.039Ω~3.9KΩ
KNP05W	KNP-500	5W	8.5	24.5	0.75	38	90	0.082Ω~5.6KΩ
KNP07S	KNP-700-S	7W-S	8.5	24.5	0.75	38	90	0.082Ω~5.6KΩ
KNP07W	KNP-700	7W	8.5	29.5	0.75	38	B/B	0.1Ω~8.2KΩ
KNP08S	KNP-800-S	8W-S	8.5	29.5	0.75	38	B/B	0.1Ω~8.2KΩ
KNP08W	KNP-800	8W	8.5	39.5	0.75	38	B/B	0.15Ω~12KΩ
KNP09S	KNP-900-S	9W-S	8.5	39.5	0.75	38	B/B	0.15Ω~12KΩ
KNP09W	KNP-900	9W	8.5	52.5	0.75	38	B/B	0.22Ω~15KΩ
KNP0AS	KNP-1000-S	10W-S	8.5	52.5	0.75	38	B/B	0.22Ω~15KΩ

## KNS Type

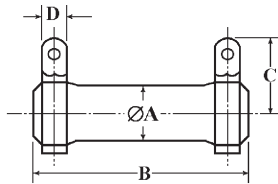


## Derating Curve

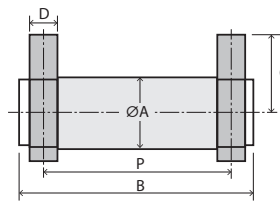


Part No	Type	Power Rating 70°C	Dimension (mm)						Resistance Range
			D±1	L±1.5	P ±1.0	H±1.0	h±1.0	B±0.5	
KNS02W	KNS-200	2W	7.0	19.0	8	19	12	4.5	0.05Ω~470Ω
KNS03W	KNS-300	3W	7.0	21.0	10	19	13	4.5	0.068Ω~470Ω
KNS05W	KNS-500	5W	9.0	26.0	15	21.5	13	6.5	0.01Ω~750Ω
KNS07W	KNS-700	7W	9.0	31.0	20	21.5	13	6.5	0.1Ω~1.1KΩ
KNS08W	KNS-800	8W	9.0	41.0	32.5	21.5	13	6.5	0.2Ω~2.2KΩ
KNS0AW	KNS-1000	10W	9.0	54.0	43	21.5	13	6.5	0.3Ω~3.3KΩ

## KNH Type



## KNHA Type



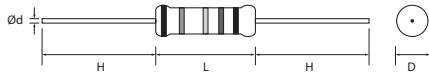
Part No	Type	Power Rating 70°C	Dimension (mm)				Resistance Range
			A±1.5	B±1.5	C ±3	D±1	
KNH020	KNH-20W	20W	19	50	19	5	0.4Ω~10KΩ
KNH025	KNH-25W	25W	19	60	19	5	0.4Ω~10KΩ
KNH030	KNH-30W	30W	19	75	19	5	0.5Ω~15KΩ
KNH040	KNH-40W	40W	19	90	19	5	0.6Ω~20KΩ
KNH050	KNH-50W	50W	31	75	31	8	3Ω~25KΩ
			28				
KNH060	KNH-60W	60W	31	90	31	8	3Ω~30KΩ
			28				
KNH080	KNH-80W	80W	31	115	31	8	3Ω~40KΩ
			28				
KNH.....100	KNH-100W	100W	31	140	31	8	3Ω~50KΩ
			28				
KNHA25	KNHA-25W	25W	21	41	24	5	0.4Ω~10KΩ
KNHA30	KNHA-30W	30W	21	42	24	5	0.4Ω~10KΩ

## Feature

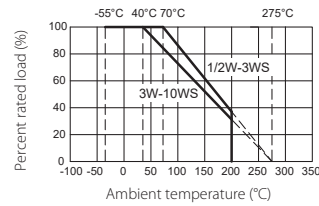
- Excellent flame retardant coating
- Too low or too high ohmic value can be supplied on a case to case basis
- Non-inductive production process



## Dimension (mm)



## Derating Curve



Part No	Type	Dimension (mm)					Resistance Range
		D±1	L±1	d±0.05	H±3	PT	
KNPNW2	KNPN-50	3.0	9.5	0.54	28	52	0.01Ω~30Ω
KNPN1S	KNPN-100-S	3.0	9.5	0.54	28	52	
KNPN1W	KNPN-100	4.0	11.5	0.70	25	52	0.01Ω~62Ω
KNPN2S	KNPN-200-S	4.0	11.5	0.70	25	52	
KNPN2W	KNPN-200	5.5	15.5	0.70	28	64	0.018Ω~120Ω
KNPN3S	KNPN-300-S	5.5	15.5	0.70	28	64	
KNPN3W	KNPN-300	6.5	17.5	0.75	28	64	0.024Ω~150Ω
KNPN5S	KNPN-500-S	6.5	17.5	0.75	28	64	
KNPN5W	KNPN-500	8.5	24.5	0.75	38	90	0.043Ω~430Ω
KNPN7S	KNPN-700-S	8.5	24.5	0.75	38	90	
KNPN7W	KNPN-700	8.5	29.5	0.75	38	B/B	0.047Ω~430Ω
KNPN8S	KNPN-800-S	8.5	29.5	0.75	38	B/B	
KNPN8W	KNPN-800	8.5	39.5	0.75	38	B/B	0.091Ω~620Ω
KNPN9S	KNPN-900-S	8.5	39.5	0.75	38	B/B	
KNPN9W	KNPN-900	8.5	52.5	0.75	38	B/B	0.13Ω~820Ω
KNPNAS	KNPN-1000-S	8.5	52.5	0.75	38	B/B	

## Performance Specification

- Temperature coefficient** ≥20 Ω: ±300PPM/°C; < 20Ω: ±400PPM/°C
- Short-time Overload**  $\Delta R/R \leq \pm(2\%+0.05 \Omega)_{Max}$ , with no evidence of mechanical damage
- Terminal strength** No evidence of mechanical damage
- Soldering heat**  $\Delta R/R \leq \pm(1\%+0.05 \Omega)_{Max}$ , with no evidence of mechanical damage
- Solderability** Coverage must be over 95%.
- Load life in humidity**  $\Delta R/R \leq \pm(5\%+0.05 \Omega)_{Max}$ , with no evidence of mechanical damage
- Load life**  $\Delta R/R \leq \pm(5\%+0.05 \Omega)_{Max}$ , with no evidence of mechanical damage
- Resistance to solvent** No evidence of mechanical damage

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

