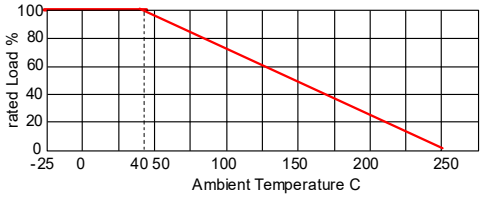
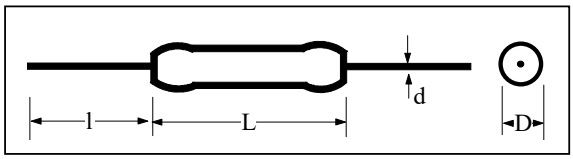
Wire Wound Resistors – KNP series

- excellent stability in high temperature, resistant to humidity and shock with economic price
- Instant overload capability; low noise figure
- Non Flammable Construction
- Non Inductance type available – NKNP and NKNT
- High Surge type available
- with Power up to 30W
- Resistance range : 0.01 ohm – 100k ohm
- Precision tolerance : +/-0.1%, +/-0.5%, +/-1%, +/-5%, +/-10%
- Resistor Colour support : Green, Gray and Black
- Marking for 1/2W to 5W : standard colour code ring
- Marking for 5W to 30W : resistance value and power marking
- support non-standard resistance value

KNP & NKNP Derating Curve



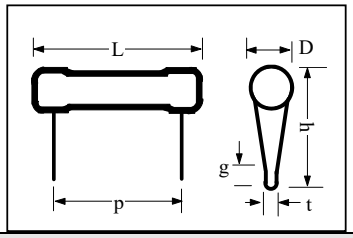
KNP series



KNP and NKNP type

Power range	KNP & NKNP dimension				Resistance range in ohm		Dielectric Voltage
	D + /-0.5mm	L+/-1mm	lead length (l) in mm +/-3mm	Lead wire diameter d / mm	KNP	NKNP	
1/2W	3.5	9	25	0.65	0.1 – 82	0.05 - 41	300V
1W	4.5	10.5	25	0.65	0.1 - 100	0.05 - 50	300V
1Ws	3.5	9	25	0.65	0.1 – 82	0.05 - 41	300V
2W	5	15	25	0.78	0.1 - 220	0.05 - 110	350V
2Ws	4.5	10.5	25	0.78	0.1 - 100	0.05 - 50	300V
3W	6	17	25	0.78	0.1 - 510	0.05 - 255	400V
3Ws	5	15	25	0.78	0.1 - 220	0.05 - 110	350V
5W	8	24	25	0.78	0.1 - 1.5K	0.05 - 750	500V
5Ws	6	17	25	0.78	0.1 - 510	0.05 - 255	400V
7W	8	31	25	0.78	0.1 - 3K	0.05 - 1.5K	500V
7Ws	8	24	25	0.78	0.1 - 1.5K	0.05 - 750	500V
8W	8	31	25	0.78	0.1 - 3K	0.05 - 1.5K	500V
8Ws	8	24	25	0.78	0.1 - 1.5k	0.05 - 750	500V
10W	8	41	25	0.78	0.1 - 8k	0.05 - 4K	500V
10Ws	8	31	25	0.78	0.1 - 3k	0.05 - 1.5K	500V
15W	8	52	25	0.78	0.1 - 10k	0.05 - 5K	500V
20W	8	61	25	0.78	0.1 - 12k	0.05 - 6K	500V
25W	8	61	25	0.78	0.1 - 12k	0.05 - 6K	500V
30W	8	70	25	0.78	0.1 - 15k	0.05 - 7.5K	500V

KNT series



KNT and NKNT type

	D + /-0.5mm	L+/-1mm	Height h in mm	Pitch p in mm	g in mm	t in mm	KNT	NKNT	
2.5W	5	19	10	10	4	1	0.1 - 220	0.05 - 110	300V
4W	5	24	10	15	4	1	0.1 - 220	0.05 - 110	400V
5W	8	24	23	14	4.5	3	0.1 - 1.5K	0.05 - 750	500V
6W	8	24	23	14	4.5	3	0.1 - 1.5K	0.05 - 750	500V
7W	8	31	23	22	4.5	3	0.1 - 3K	0.05 - 1.5K	500V
8W	8	31	23	22	4.5	3	0.1 - 3K	0.05 - 1.5K	500V
10W	8	41	23	32	4.5	3	0.1 - 8K	0.05 - 4K	500V
15W	8	52	23	42	4.5	3	0.1 - 10K	0.05 - 5K	500V
20W	8	61	23	52	4.5	3	0.1 - 12K	0.05 - 6K	500V
25W	8	61	23	52	4.5	3	0.1 - 12K	0.05 - 6K	500V
30W	8	70	23	62	4.5	3	0.1 - 15K	0.05 - 7.5K	500V

Electrical Characteristics :

Testing	Test conditions	Specifications
Resistance tolerance	JIS-C-5202 5-1	Resistance Nominal Tolerance 1 ≤R 1>R +/-5% (J), +/-10% (10)
Temperature coefficient	JIS-C-5202 5-2, –55C - 155C	+/-350 PPM/C Max
Short Time over load	JIS-C-5202 5-5 1000% rated power 5s for KN, 250% rate voltage 5s for MO	△R≤ +/- (2% + 0.05Ω)
Rated Load	Rated wattage 30 min	△R≤ +/- (2% + 0.05Ω)
Soldering	JIS-C-5202 6-4 235C 3s	△R≤ +/- (0.2% + 0.05Ω)
Insulation Resistance	JIS-C-5202 5-6	Over 1000MΩ
Moisture Resistance	JIS-C-5202 7-9 1000hr	△R≤ +/- (2%Ro + 0.05Ω)
Moisture-Proof Load Life	JIS-C-5202 7-10 40C 95% RH on - off cycle 1000hrs.	△R≤ +/- (5%Ro + 0.01Ω)
Flammability	500%, 1000%, 1600% power rating 5min	Not flamed

Part Number :

Series	Rated Power	Resistance Value (ohm)	Resistance Tolerance	Packaging
KNP	60 - 120W	0.01 ohm = R01	B=+/-0.1% D=+/-0.5%	T = tape
NKNP	60 - 200W	0.1 ohm = R1	F = +/-1% J = +/-5%	B = bulk
KNT	60 - 3000W	15 ohm = 15R	K= +/-10%	
NKNT		10k ohm = 10kR		