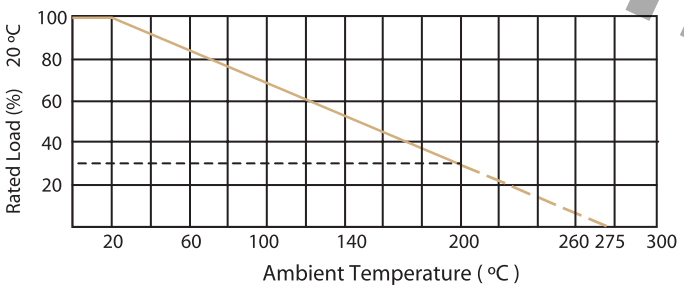
Wire Wound Resistors

GENERAL PURPOSE

Power Rating : 1/2W, 1WS, 1W, 2WS, 2W, 3WS, 3W, 5WS, 5W, 7WS
Resistance Tolerance : ±5%
FlameProof Silicone Coating
Green body color
Non-inductive resistors
High safety standard

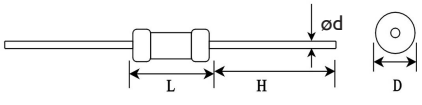
POWER DERATING CURVE

For resistors operated in ambient temperatures above 20°C , power rating must be derated in accordance with the curve below.



DIMENSIONS

Unit : mm



STYLE		DIMENSION			
Normal	**Miniature**	**L**	**øD**	**H**	**ød**
NKN-50	NKN1WS	9.0±0.5	3.3±0.3	26±2.0	0.6±0.05
NKN100	NKN2WS	11.5±1.0	4.5±0.5	35±2.0	0.8±0.05
NKN200	NKN3WS	15.5±1.0	5.0±0.5	33±2.0	0.8±0.05
NKN300	NKN5WS	17.5±1.0	6.5±1.0	32±2.0	0.8±0.05
NKN500	NKN7WS	24.5±1.0	8.5±1.0	39±2.0	0.8±0.05

ELECTRICAL CHARACTERISTICS

STYLE	NKN-50	NKN1WS	NKN100	NKN2WS	NKN200	NKN3WS	NKN300	NKN5WS	NKN500	NKN7WS
Power Rating AT 70°C	1/2W	1W		2W		3W		5W		7W
Standard Value Range ±5%	0.1Ω-5Ω		0.1Ω-10Ω		0.1Ω-22Ω		0.1Ω-27Ω		0.1Ω-33Ω	0.1Ω-27Ω
Dielectric Withstanding Voltage	250V									
Minimum Value Range ±5%	0.05Ω									
Operating Temp. Range	-40°C to +200°C									
Temperature Coefficient	±300ppm/°C									

* Resistance range for standard resistance, below or over this resistance on request.

ENVIRONMENTAL CHARACTERISTICS

PERFORMANCE TEST	TEST METHOD		APPRAISE
Terminal Strength	JIS-C-5202 6.1	Direct load for 10 Sec. in the Direction of the Terminal Leads	≥2.5kg (24.5N)
Resistance to Soldering Heat	JIS-C-5202 6.4	350°C ± 10°C for 3 ± 0.5 Seconds	±1.0%+0.05Ω
Solderability	JIS-C-5202 6.5	235°C ± 5°C for 5 ± 0.5 Seconds	95% Min. Coverage
Resistance to Solvent	JIS-C-5202 6.9	IPA for 1 Min. with Ultrasonic	No Deterioration of Coatings and Markings
Temperature Cycling	JIS-C-5202 7.4	-55°C→Room Temp.→+155°C→Room Temp. for 5 Cycles	±1.0%+0.05Ω
Humidity	JIS-C-5202 7.5	40±2°C, 90~95% RH for 1,000 Hrs.	±3.0%+0.05Ω
Load Life in Humidity	JIS-C-5202 7.9	40±2°C, 90~95% RH at RCWV for 1,000 Hrs. (1.5 Hrs. on , 0.5 Hrs. off)	±5.0%+0.05Ω
Load Life	JIS-C-5202 7.10	70°C at RCWV for 1,000 Hrs. (1.5 Hrs. on, 0.5 Hrs. off)	±5.0%+0.05Ω
Overload Flame Retardant	JIS-C-5202 7.12	4 Times RCWV for 1 minute	No evidence of flaming or arcing

* Rated Continuous Working Voltage (RCWV)= $\sqrt{\text{Power Rating x Resistance Value}}$