

Wirewound Resistors (mini size)

KNP-S Series

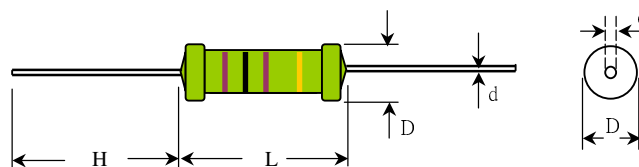


FEATURES

- RoHS compliant of full series
- Small size and low cost
- Super heat dissipation, instant overload capability
- Standard Tolerance: $\pm 5\%$ (available 1% - 5%)
- Standard Value: E24 series as range below
- Flameproof coating, Color band marking
- Body Color: Green (or Grey)
- Available in non-inductive style (As NKNP-S type)

MATERIAL

- Core: High purity ceramic Al_2O_3
- Element: Alloy Resistance Wire
- Termination: Standard solder-plated cooper lead
- Coating: Green (or Grey) silicone



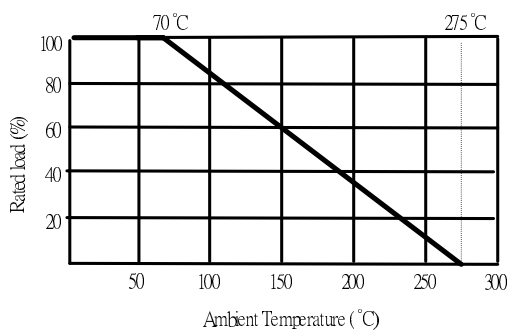
GENERAL SPECIFICATION

TYPE	DIMENSION (mm)				POWER RATING	MAXIMUM WORKING VOLT.	RESISTANCE RANGE	
	L	D	H	$d \pm 0.05$			Standard	Min. / Maximum
KNP1WS	9.0 ± 1.0	3.0 ± 1.0	28 ± 3.0	0.70	1W	$E = \sqrt{P \times R}$	$0.1 \Omega \sim 80 \Omega$	xxx / 300Ω
KNP2WS	11.0 ± 1.0	4.0 ± 1.0	35 ± 3.0	0.80	2W		$0.1 \Omega \sim 100 \Omega$	$0.01 \sim 0.91 \Omega / 1.0K \Omega$
KNP3WS	15.0 ± 1.0	5.0 ± 1.0	35 ± 3.0	0.80	3W		$0.1 \Omega \sim 100 \Omega$	$0.01 \sim 0.91 \Omega / 2.4K \Omega$
KNP5WS	17.0 ± 1.0	6.0 ± 1.0	38 ± 3.0	0.80	5W		$0.1 \Omega \sim 150 \Omega$	$0.01 \sim 0.91 \Omega / 2.4K \Omega$
KNP7WS	25.0 ± 1.0	8.0 ± 1.0	38 ± 3.0	0.80	7W		$0.1 \Omega \sim 500 \Omega$	$3.0K \Omega$

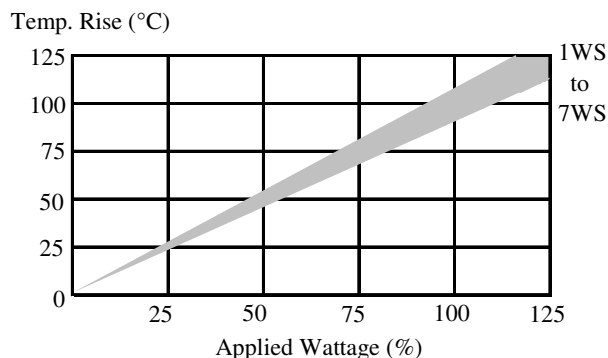
* Maximum overload voltage equals to $\sqrt{P \times R \times 10}$, P= Wattage Power, R= Ohmic Value

* Resistance values out of standard range is available on request

DERATING CURVE



TEMPERATURE RISE



CHARACTERISTIC

Temperature Coefficient	± 200 ppm
Insulation Resistance	$10,000M\Omega$ Min.
Load Life (1000 hours)	$< \pm 5\% + 0.05 \Omega$
Shorttime Overload	$< \pm 2\% + 0.05 \Omega$
Temperature Cycling	$< \pm 1\% + 0.05 \Omega$
Moisture Resistance	$< \pm 5\% + 0.05 \Omega$
Shock & Vibration	$< \pm 1\% + 0.05 \Omega$
Effect of Sodering	$< \pm 2\% + 0.05 \Omega$

HOW TO ORDER :

KNP1WS	0R47	J	B
I	I	I	I
Type/Power	Resis. Value	Tolerance	Package
KNP1WS	0R1=0.1 Ω	J= $\pm 5\%$	B= Bulk
KNP2WS	10R=10 Ω	G= $\pm 2\%$	T= Ammo Box
KNP3WS	100R=100 Ω	F= $\pm 1\%$	R= Tape/Reel
KNP5WS	1K=1K Ω		Forming
KNP7WS			M, MB
NKNP1WS..			MK, FK
etc			