

Anti-Surge Wire-Wound Fixed Resistors

Performance Specification

Temperature Coefficient	<20Ω: ±400PPM/°C; ≥20Ω: ±300PPM/°C
Short Time Overload	±(2.0% + 0.05Ω)Max, with no evidence of mechanical damage.
Dielectric Withstanding Voltage	No evidence of flashover, mechanical damage, arcing or insulation breakdown.
Pulse Overload	±(5.0% + 0.05Ω)Max, with no evidence of mechanical damage.
Terminal Strength	No evidence of mechanical damage.
Resistance to Soldering Heat	±(1.0% + 0.05Ω)Max, with no evidence of mechanical damage.
Solderability	Min. 95% coverage.
Temperature Cycling	±(2.0% + 0.05Ω)Max, with no evidence of mechanical damage.
Load Life In Humidity	±(5.0% + 0.05Ω)Max, with no evidence of mechanical damage.
Load Life	±(5.0% + 0.05Ω)Max, with no evidence of mechanical damage.
Non-Flame	No evidence of flaming or arcing
Surge Immunity (IEC 61000-4-5)	±(5.0% + 0.05Ω)Max.

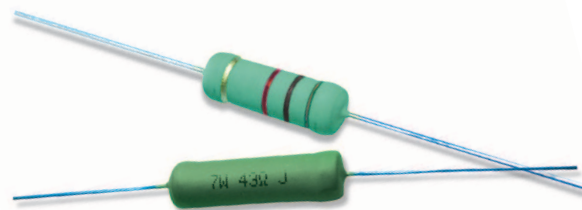
Ordering Procedure: Ex.: KNP 1W, +/-5% 100Ω, T/B-1000, AntiSurge

K	N	P	A	1	W	J	0	1	0	1	A	1	0
Type: KNP = KNP			Wattage: Normal W2 = 1/2W 1W = 1W 9W = 9W AW = 10W Small 1S = 1W-S 9S = 9W-S AS = 10W-S		Resistance Value: - E-24 series: 1st digit is "0" 2nd & 3rd digits are the significant figures of the resistance 4th indicates the number of zeros: "J" ~ 0.1, "K" ~ 0.01 ?? ∴ 4.7Ω ~ 47J, 4.7KΩ ~ 472 - E-96 series: 1st to 3rd digits are the significant figures of the resistance and the 4th digit indicates the number of zeros: ?? ∴ 1.33K = 1331			Packing Type: A = Tape/Box T = Tape/Reel B = Bulk/Box		Packing Qty: 1 = 1,000 pcs. A = 500 pcs. B = 2,500 pcs.(for T/R) 0 = Bulk/Box		Additional Information: 0 = PT-52mm, PT-26mm, Standard lead wire for Bulk/Box 8 = PT-58mm 9 = PT-64mm	
Feature: A = Anti-Surge			Tolerance: F = ±1% G = ±2% J = ±5% K = ±10%										

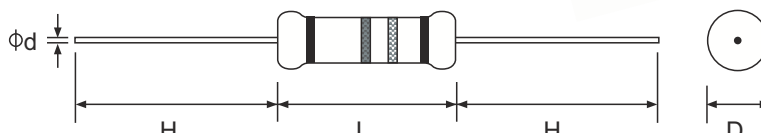
Anti-Surge Wire-Wound Fixed Resistors

Features

- Color coating is "Green"
- Excellent flame resistance
- Too low or too high ohmic value can be supplied on a case to case basis
- Special Fusing Wire-Wound Resistors can be supplied on a case to case basis
- Special Anti-Surge function items available (per IEC 61000-4-5)



Standard : 2% ,5% ,10% -- E-24 series
1% -- E-96 series



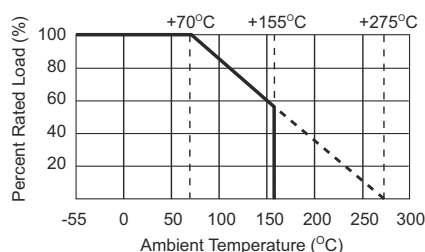
Part No.	Style	Power rating at 70℃	Dimension (mm)					Std Resistance Range	High Resistance Range	Max Surge Voltage
			D(max)	L(max)	H±3	d±0.05	PT			
Normal Size										
KNPAW2	KNP 50	1/2W (0.50W)	3.5	10.0	28	0.54	52	10Ω~39Ω	40Ω~560Ω	4KV
KNPA1W	KNP 100	1W	5.0	12.0	25	0.70	52	10Ω~50Ω	51Ω~1KΩ	5KV
KNPA2W	KNP 200	2W	5.5	16.0	28	0.70	64	10Ω~120Ω	121Ω~2KΩ	6KV
KNPA3W	KNP 300	3W	6.5	17.5	28	0.75	64	10Ω~200Ω	201Ω~3KΩ	7KV
KNPA5W	KNP 500	5W	8.5	25	38	0.75	B/B	10Ω~470Ω	471Ω~5KΩ	9KV
KNPA7W	KNP 700	7W	8.5	30	38	0.75	B/B	10Ω~470Ω	471Ω~6KΩ	10KV
KNPA8W	KNP 800	8W	8.5	40	38	0.75	B/B	10Ω~1.5KΩ	1.6KΩ~10KΩ	10KV
KNPA9W	KNP 900	9W	8.5	53	38	0.75	B/B	10Ω~1.5KΩ	1.6KΩ~15KΩ	10KV

Note: For KNPA Series Max. Working Voltage: 500V
Max. Overload Voltage: 1,000V
Dielectric Withstanding Voltage: 1/2W : 350V, >1/2W : 500V

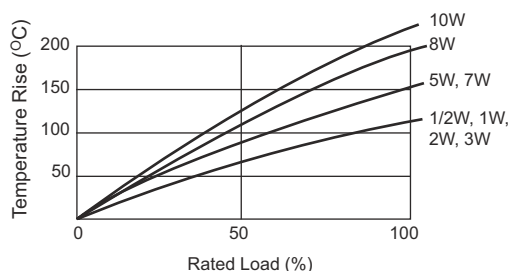
The following are available on case to case basis:

- Low and high resistance
- Small size
- Higher surge voltage

Derating Curve



Heat Rise Chart



Surge Waveform (1.2/50μs)

