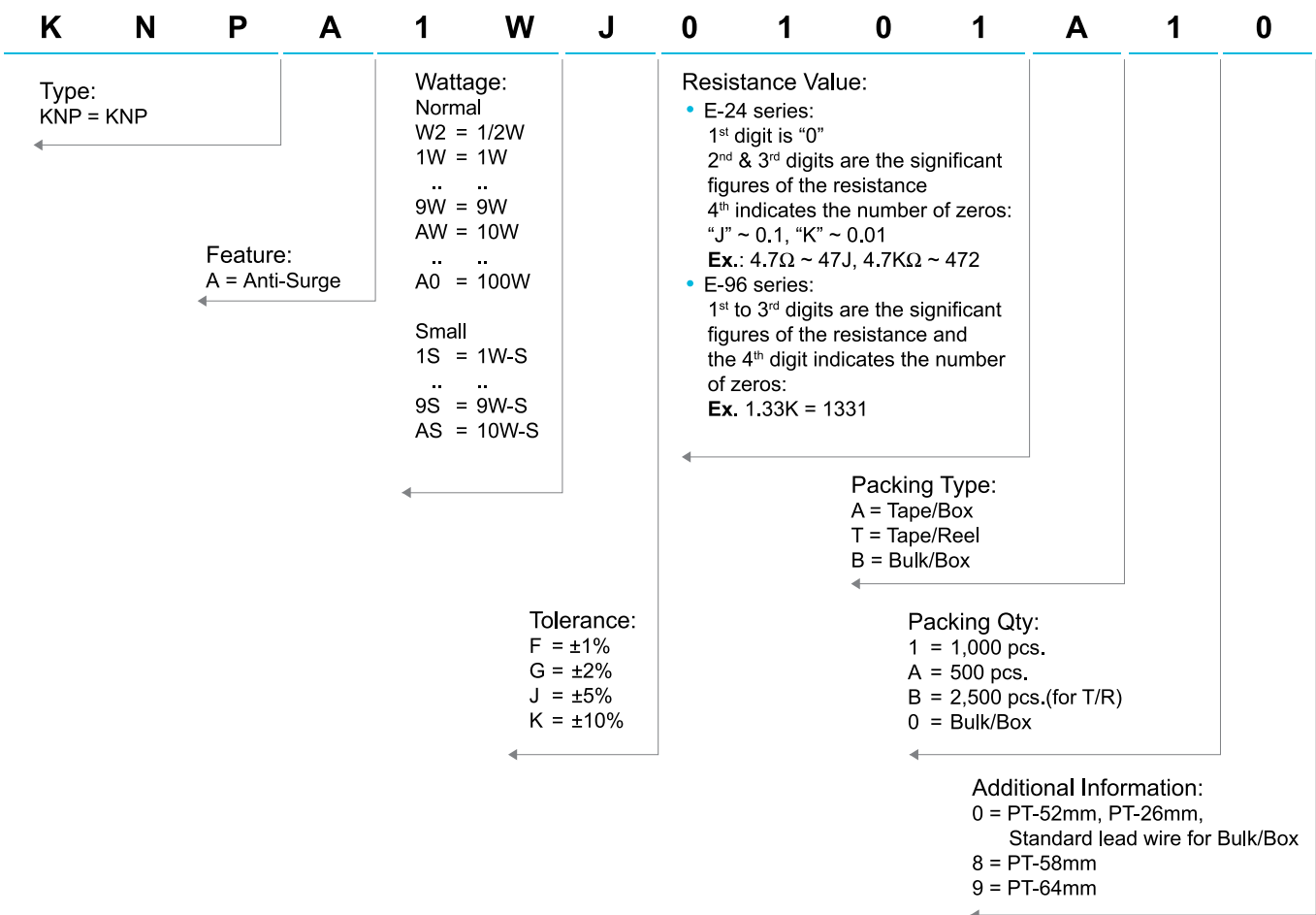


Anti-Surge Wire-Wound Fixed Resistors

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.: KNPA 1W, +/-5% 100Ω, T/B-1000, AntiSurge



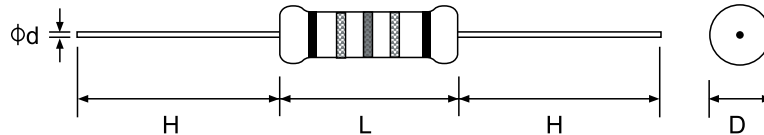
Anti-Surge Wire-Wound Fixed Resistors

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



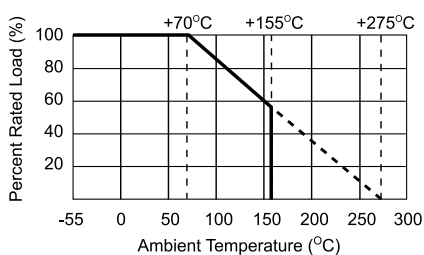
Type	Style	Power Rating at 70°C	Dimension (mm)					Standard Resistance Range	High Resistance Range	Surge Voltage Range
			D±1	L±1	d±0.05	H±3	PT			
Normal Size										
KNPAW2	KNPA50	1/2W(0.5W)	3.5	10.0	0.54	28	52	10Ω~39Ω	40Ω~560Ω	1KV-4KV
KNPA1W	KNPA100	1W	5.0	12.0	0.70	25	52	10Ω~50Ω	51Ω~1KΩ	2KV-5KV
KNPA2W	KNPA200	2W	5.5	16.0	0.70	28	64	10Ω~120Ω	121Ω~2KΩ	3KV-6KV
KNPA3W	KNPA300	3W	6.5	17.5	0.75	28	64	10Ω~200Ω	201Ω~3KΩ	4KV-7KV
KNPA5W	KNPA500	5W	8.5	25.0	0.75	38	B/B	10Ω~470Ω	471Ω~5KΩ	5KV-8KV
KNPA7W	KNPA700	7W	8.5	30.0	0.75	38	B/B	10Ω~470Ω	471Ω~6KΩ	6KV-10KV
KNPA8W	KNPA800	8W	8.5	40.0	0.75	38	B/B	10Ω~1.5KΩ	1.6KΩ~10KΩ	7KV-10KV
KNPA9W	KNPA900	9W	8.5	53.0	0.75	38	B/B	10Ω~1.5KΩ	1.6KΩ~15KΩ	8KV-10KV
Small Size										
KNPA1S	KNPA-100-S	1W	3.5	10.0	0.54	28	52	10Ω~39Ω	40Ω~560Ω	1KV-4KV
KNPA2S	KNPA-200-S	2W	5.0	12.0	0.70	25	52	10Ω~50Ω	51Ω~1KΩ	2KV-5KV
KNPA3S	KNPA-300-S	3W	5.5	16.0	0.70	28	52	10Ω~120Ω	121Ω~2KΩ	3KV-6KV
KNPA5S	KNPA-500-S	5W	6.5	17.5	0.75	28	64	10Ω~200Ω	201Ω~3KΩ	4KV-7KV
KNPA7S	KNPA-700-S	7W	8.5	25.0	0.75	38	B/B	10Ω~470Ω	471Ω~5KΩ	5KV-8KV
KNPA8S	KNPA-800-S	8W	8.5	30.0	0.75	38	B/B	10Ω~470Ω	471Ω~6KΩ	6KV-10KV
KNPA9S	KNPA-900-S	9W	8.5	40.0	0.75	38	B/B	10Ω~1.5KΩ	1.6KΩ~10KΩ	7KV-10KV
KNPAAS	KNPA-1000-S	10W	8.5	53.0	0.75	38	B/B	10Ω~1.5KΩ	1.6KΩ~15KΩ	8KV-10KV

Note: For KNPA Series Max. Working Voltage: 500V
 Max. Overload Voltage: 1,000V
 Dielectric Withstanding Voltage : Dimension ≤ 3.5 x 10 : 350V
 > 3.5 x 10 : 500V

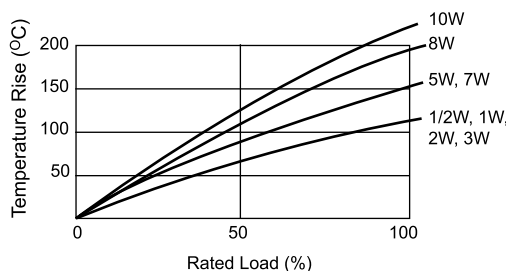
The following are available on case to case basis:

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

Derating Curve



Heat Rise Chart



Surge Waveform (1.2/50μs)

