

# Anti-Surge Wire Wound (KNPA Series)



厚聲集團

## Features:

- Excellent flame retardant coating
- Power up to 10W
- Low / High value available
- Anti surge function ( IEC 61000-4-5)
- Surge immunity up to 10KV
- High Power in small body size available

## Application:

- Motor Control Applications, TV, Monitors
- Test & Measurement Equipment
- Surge Protection & Voltage Divider
- Power Supply, Power Electronic control
- Dishwashers, Dryers, Washing Machines
- Energy / Smart / Digital meter

## Cross Reference to:

Vishay : Z300-G, CWHS

Firstohm : SWA

TT Electronics : WHS

\* Higher surge available case to case basis

\* Special fusing wire wound can be supplied on a case to case basis

IATF 16949  
ISO 14001

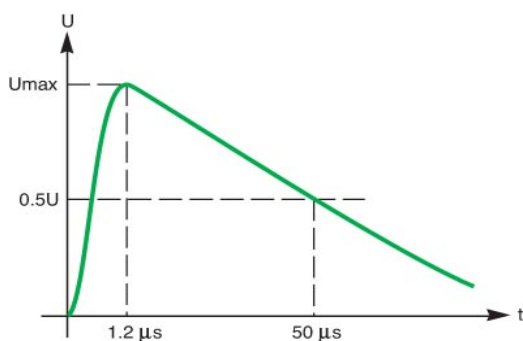
[www.royalohm.com](http://www.royalohm.com)

44 Years!  
Resistors Specialist

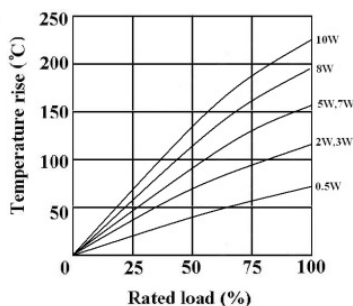
# Anti-Surge Wire Wound (KNPA Series)



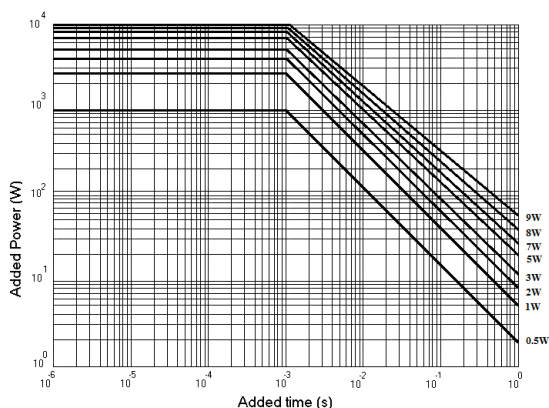
Surge Waveform (1.2/50μs)



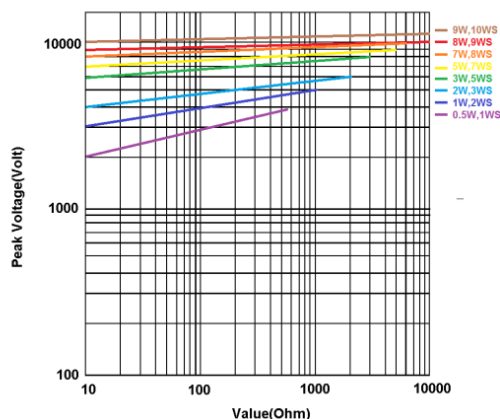
Heat Rise Chart



Pulse Capability



1.2/50μs Voltage Capability



\*Operating Temperature: -55°C~+155°C

Watt	Dimension (mm)				Low Resistance Range	Max. Surge	Medium Resistance Range	Max. Surge	High Resistance Range	Max. Surge
	D ± 1.0	L ± 1.0	d ± 0.05	H ± 3.0						
1/2W 1WS	3.5	10.0	0.54	28	10Ω ~ 40Ω	2KV	43Ω ~ 240Ω	3KV	270Ω ~ 560Ω	4KV
1W 2WS	5.0	12.0	0.70	28	10Ω ~ 50Ω	3KV	51Ω ~ 240 Ω	4KV	270Ω ~ 1kΩ	5KV
2W 3WS	5.5	16.0	0.70	28	10Ω ~ 100Ω	4KV	110Ω ~ 240Ω	5KV	270Ω ~ 2kΩ	6KV
3W 5WS	6.5	17.5	0.75	28	10Ω ~ 100Ω	6KV	110Ω ~ 680Ω	7KV	750Ω ~ 3kΩ	8KV
5W 7WS	8.5	25.0	0.75	38	10Ω ~ 160Ω	7KV	180Ω ~ 680Ω	8KV	750Ω ~ 5kΩ	9KV
7W 8WS	8.5	30.0	0.75	38	10Ω ~ 160Ω	8KV	180Ω ~ 680Ω	9KV	750Ω ~ 6kΩ	10KV
8W 9WS	8.5	40.0	0.75	38	10Ω ~ 160Ω	9KV	180Ω ~ 680Ω	10KV	750Ω ~ 10kΩ	10KV
9W 10WS	8.5	53.0	0.75	38	10Ω ~ 160Ω	10KV	180Ω ~ 680Ω	10KV	750Ω ~ 15kΩ	10KV



IATF 16949  
ISO 14001

This document is a general reference only  
Any inquiry/technical support pls. send  
email to your contact sales.

# Legal Disclaimer



The information provided in the catalog/data sheet /single pages/short form is for the purpose of describing product specifications only, and ROYALOHM and its affiliates (hereinafter collectively referred to as "ROYALOHM") hereby disclaim any liability for any errors, inaccuracies or incompleteness contained in any product-related information (including but not limited to product specifications, datasheets, pictures, graphics). ROYALOHM reserves the right to modify this content without prior notice. Thank you for your understanding.

ROYALOHM makes no representation, warranty, and guarantee as to the fitness of its products for any particular purpose or the continuing production of any ROYALOHM products.

To the maximum extent permitted by law, ROYALOHM disclaims

- I. any and all liability arising out of the application or use of any ROYALOHM product,
- II. any and all liability, including without limitation special, consequential or incidental damages, and
- III. any and all implied warranties, including warranties of fitness for a particular purpose, non-infringement and merchantability.

ROYALOHM products are not intended for use in medical, life-saving, or life-sustaining equipment, nor are they intended for any other purpose where product failure or mismanagement could endanger life or cause harm to or death to the human body.

Customers use or sell ROYALOHM products for the above purposes at their own risk. If need products for such purposes, please be sure to consult with our company to obtain relevant information about the applicable products.

Regardless of the application of ROYALOHM products, it is recommended to carry out safety tests while using measures such as protective circuits and redundant circuits to protect the safety of equipment.



**IATF 16949**  
**ISO 14001**

This document is a general reference only  
Any inquiry/technical support pls. send  
email to your contact sales.