Data Sheet

Customer:	
Product:	**Flame Proof Surge Wire Wound Leaded Resistor – KNS Series**
Size.:	**0932/1145/1550/1760/2480**
Issued Date:	**16-May-23**
Edition:	**REV.A**

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16-May-23	**16-May-23**	**16-May-23**	**16-May-23**	
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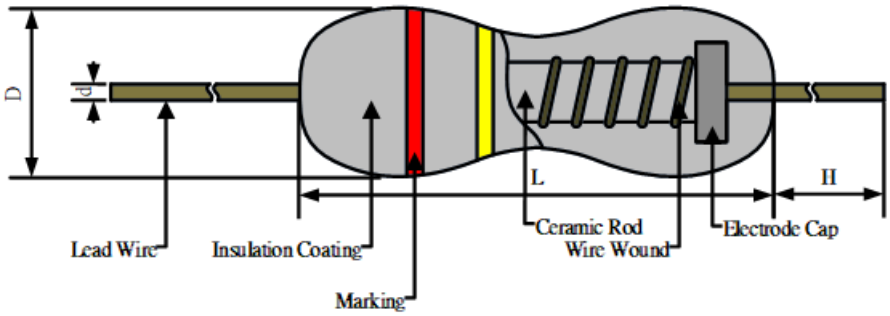
Flame Proof Surge Wire Wound Leaded Resistor

■Features

- High voltage surge immunity, up to 12 kV
- Silicone coating
- Meet flameproof construction UL-94V0
- Tinned copper leads
- Value Range ±5%、±1%
- RoHS compliant

■Construction & Dimensions



Type	L (mm)	D (mm)	H (mm)	d (mm)
0932	9.0±0.5	3.2±0.5	26±3.0	0.65±0.03
1145	11.5±1.0	4.5±0.5	35±3.0	0.78±0.03
1550	15.5±1.0	5.0±0.5	32±3.0	0.78±0.03
1760	17.5±1.0	6.0±0.5	32±3.0	0.78±0.03
2480	24.5±1.0	8.0±0.5	38±3.0	0.78±0.03

■Part Numbering

KNS	0932	J	A	F	U	0100
Product Type	Dimensions (L×D)	Resistance Tolerance	Packaging Code	TCR (PPM/˚C)	Power Rating	Resistance
	0932: 9.0x3.2 1145: 11.5x4.5 1550: 15.5x5.0 1760: 17.5x6.0 2480: 24.5x8.0	F: ±1% J: ±5%	A: Ammo B: Bulk T: Taping Reel	F: ±200	E: 7W D: 5W R: 3W S: 2W T: 1W U: 1/2W	0010: 1Ω 0100: 10Ω 1000: 100Ω 1001: 1KΩ

■Standard Electrical Specifications

Item / Type	Power Rating at 70℃	Operating Temp. Range	Dielectric Withstanding Voltage	Resistance Range		TCR (±PPM/℃)
				±1%	±5%	
0932	1/2W	-55 ~ +350℃	400V	1Ω~200Ω		±200
1145	1W		400V	1Ω~470Ω		
1550	2W		500V	1Ω~1KΩ		
1760	3W		500V	1Ω~1KΩ		
2480	5W		500V	1Ω~1KΩ		

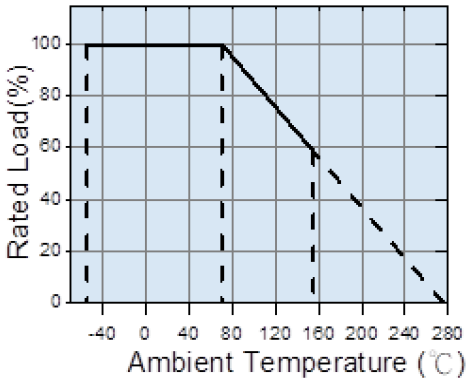
■High Power Rating Electrical Specifications

Item / Type	Power Rating at 70℃	Operating Temp. Range	Dielectric Withstanding Voltage	Resistance Range		TCR (±PPM/℃)
				±1%	±5%	
0932	1W	-55 ~ +350℃	400V	1Ω~200Ω		±200
1145	2W		400V	1Ω~470Ω		
1550	3W		500V	1Ω~1KΩ		
1760	5W		500V	1Ω~1KΩ		
2480	7W		500V	1Ω~1KΩ		

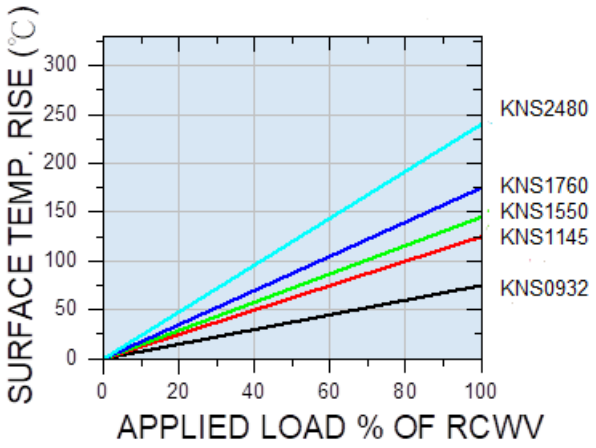
■**Resistor body color : Grey or Pink are available**

■**Value Range for standard resistance, below or over this resistance on request. Special TCR by request.**

■Derating Curve



■Hot-Spot Temperatire

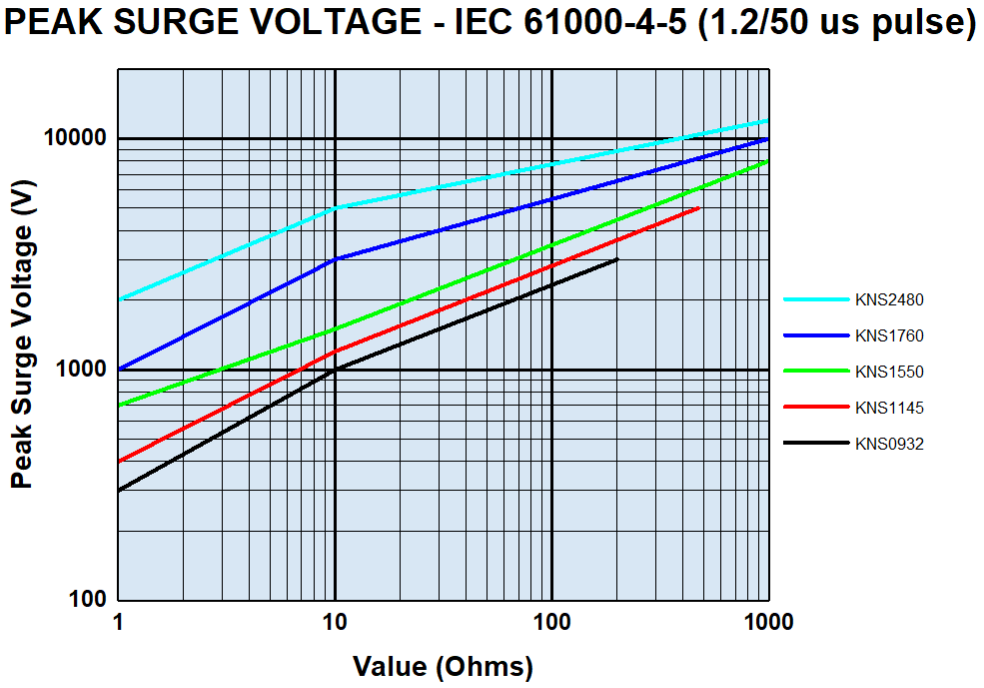


■Environmental Characteristics

Item	Specification	Test Method
Short Time Overload	±(2%+0.05Ω)	Rated power x 10 for 5 seconds
Temperature Coefficient	By Type	Resistance value at room temperature and room temperature+100℃
Dielectric Withstanding Voltage	By Type	In V-Block for 1 minute
Insulation Resistance	＞100MΩ	In V-Block
Load Life	±(5%+0.05Ω)	70℃ at RCWV for 1000hrs (1.5hrs.on，0.5hrs.off)
Load Life Humidity	±(5%+0.05Ω)	40±2℃ , 90~95%RH at RCWV for 1000hrrs (1.5hrs.on，0.5hrs.off)
Solderability	95% Min. Coverage	260℃±5℃ for 2±0.5 (sec)
Terminal strength	Tensile: ≧ 2.5 kg	Direct load for 10 sec. In the direction off the terminal leads.
Surge	±(5%+0.05Ω)	1.2/50us 30 seconds between pulses 10 times

■Reference Standards：IEC 60115-1
■Storage Temperature :0~35℃; Humidity 25~65%RH
■Shelf life: 1 years max
■Rated continuous Working Voltage (RCWV) =√(Power.Rating.*Resistance.Value.)

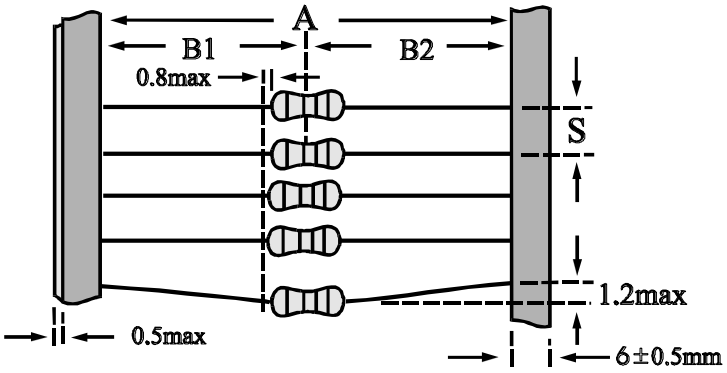
■Peak Surge Voltage-IEC 61000-4-5 (1.2/50 us pulse)



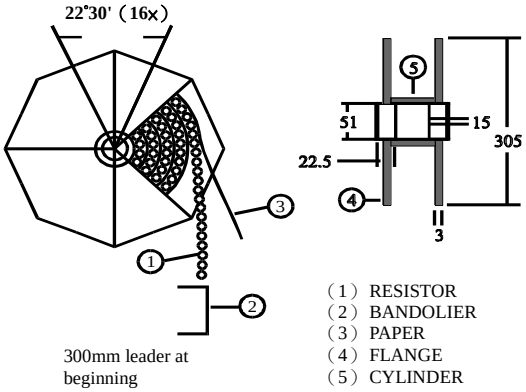
■Taping/Packing Specifications

1. Standard Type (Reel & Ammo)

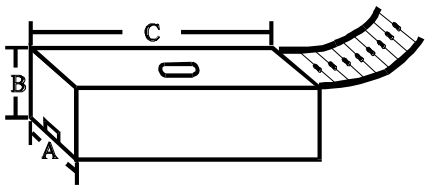
Packing Methods



Reel Packing



Ammo Packing



Unit: mm

Packaging / Type	Packing Methods			Reel Packing		Ammo Packing			
	A	B1-B2	S	Across Flange (A)	Qty	A	B	C	Qty
0932	52+1/-0	1.2	5±0.3	72	2,500	79±2	58±3	257±5	1,000
1145	52+1/-0	1.5	5±0.3	95	2,000	103±2	82±3	262±5	1,000
	73+1/-0								
1550	52+1/-0	1.5	10±0.8	95	1,000	103±2	96±3	265±5	1,000
	73+1/-0								
1760	52+1/-0	1.5	10±0.8	95	1,000	103±2	82±3	262±5	500
	73+1/-0								
2480	88+1/-0	1.5	10±0.8	110	500	115±2	73±3	265±5	250