

# Ri82 Flat High Voltage Resistors, High Voltage Ribbon Metal Glazed Resistors

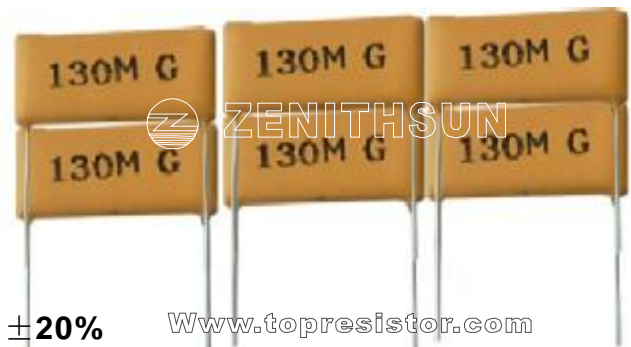
Type A: RI82 Series

Type B: RF82 Series

Power Rating: 1/8W-30W

Resistance Value: 10Ω-1GΩ

Resistance Tolerance: ±1%, ±5%, ±10%, ±20%



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

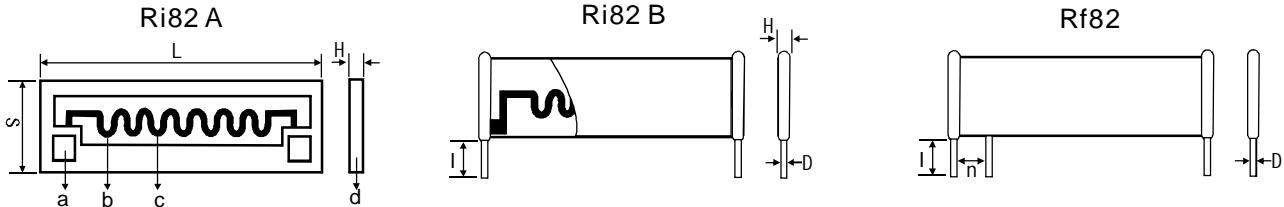
## ● Features:

- 1.ZENITHSUN produces two types of ribbon high voltage resistors:RI82 ribbon high voltage glass-glazed resistors and RF82 ribbon high voltage glass-glazed resistors voltage divider .
- 2.Thick filming resulted in high surge-resist & stability.
- 3.Operating ambient temperature:-55°C~+125°C
- 4.High resistance value.
- 5.High humidity resistance and low temperature coefficient(TCR.)
- 6.Withstand high voltage,high temperature and high reliability.
- 7.The resistors surface is green or ochre nonflammable coating.
- 8.For custom or non-inductive specifications,please contact us to discuss the details.
- 9.Delivery:7-10days

## ● Applications:

Widely used in AC/DC or pulse circuit,high voltage equipment and sampling in high voltage circuit,also used as ancillary products for air conditioning,heating equipment,and other electronic equipment.

### ● Dimensions



a. Silver-palladium electrodes  
b. Ru resistive film

c. Dielectric or insulating resin  
d. 96% Al<sub>2</sub>O<sub>3</sub> ceramic core

TYPE	Power Rating	Resistance Range(Ω)	Dimensions (mm)					Max.working Voltage(KV)	Temp.coefficient ppm/°C
			L±1	S±0.5	H±0.05	I±0.5	d±0.05		
Ri82	1/8W	100-4.7KM	8	3.5	2.5	24	0.56	2	≤200
Ri82	1/4WS	100-10KM	10	5	2.5	24	0.56	4	
Ri82	1/4W	100-10KM	22	4	2.5	24	0.56	4	
Ri82	1/4W	100-10KM	25	5	2.5	24	0.56	10	
Ri82	1/2WS	100-10KM	35	5	2.5	24	0.56	15	
Ri82	1/2W	100-1KKM	41	5	2.5	42	0.56	4	
Ri82	1WS	100-10KM	25	10	2.5	30	0.56	15	
Ri82	1W	100-10KM	30	8	2.5	30	0.56	15	
Ri82	1W	100-10KM	33	8	2.5	35	0.56	15	
Ri82	2WS	100-10KM	38	10	3	40	0.8	20	
Ri82	2W	100-10KM	45	10	3	45	0.8	20	
Ri82	2W	100-10KM	50	10	3	45	0.8	20	
Ri82	3W	100-10KM	30	15	3	35	0.8	25	
Ri82	3W	100-100KM	60	10	3	55	0.8	25	
Ri82	5W	100-200M	80	20	4	60	0.8	25	
Ri82	10W	100-200M	97	23	4	80	0.8	30	
Ri82	20W	100-200M	100	35	4	80	1	30	
Ri82	30W	100-200M	100	48	4	80	1	30	

**We can do the resistors following customer special requirement.**

TYPE	Power Rating	Dimensions (mm)					Max.working voltage (KV)	Proportion of Sampling Resistor
		L	S	H	D	n		
RF82	1/4W	25	5	2.5	0.56	4	6	According to customer's requirement, 1/1000、1/2000 1/4000 are available
RF82	1/2W	35	5	2.5	0.56	5	10	
RF82	1W	38	10	3	0.56	6	15	
RF82	2W	45	10	3	0.8	6	15	
RF82	3W	60	10	3	0.8	8	20	
RF82	5W	80	20	3	0.8	10	25	
RF82	10W	97	23	3	0.8	15	30	
RF82	20W	140	20	3	1	20	35	

**We can do the resistors following customer special requirement.**

## ● Performance Specifications

Test Item	Test Condition	Performance
Temperature coefficient	Test the resistance value at normal temperature and normal temperature added 10 °C, calculate per °C resistance value change rate.	±200~300PPM/°C
Short time overload	2.5×rated voltage or Max.overload voltage(get the lower) for 5 seconds.	$\Delta R \leq \pm(2\%R_0 + 0.05\Omega)$
Pulse overload	At 4× rated voltage or Max.pulse overload voltage(get the lower)cysle 10000±200 times(1 second on,25 seconds off).	$\Delta R \leq \pm(1\%R_0 + 0.05\Omega)$
Resistance to soldering heat	Immerge into the 350±10°C tin stove for 2~3seconds.	$\Delta R \leq \pm(1\%R_0 + 0.05\Omega)$
Solderability	Immerge into the 245±3°C tin stove for 2~3 seconds.	The soldering area is over 95%
Temperature cycling	At -55°C for 30 min,then at +25°C for 10~15 min,then at +125°C for 30min,then at +25°C for 10~15 min,total 5 cycles.	$\Delta R \leq \pm(1\%R_0 + 0.05\Omega)$
Load life in humidity	Overload rated voltage or Max.working voltage(get the lower) for 1000 hours (1.5 hours on and half-hour off) at the 40±2°C and 90~95% relative humidity.	$\Delta R \leq \pm(5\%R_0 + 0.05\Omega)$
Load life in heat	Overload rated voltage or Max.working voltage (get the lower) for 1000hours(1.5 hours on and half-hour off) at 70±2°C.	$\Delta R \leq \pm(5\%R_0 + 0.05\Omega)$
Aigulle overload	Over load 5~9KV DC Voltage, 2.5 seconds power on, 2.5 seconds power off, 10cycles.	$\Delta R \leq \pm 10\%R_0$ , No mechanical damage
Nonflammability	Respectively load AC voltage by 5,10,16 times rated power for 5 minutes	No visible flame.

## ● How to order

R182	1W	100KΩ	J
①	②	③	④
Type	Power Rating	Resistance Value	Resistance Tolerance
R182	1/8W-30W	100Ω-1GΩ	±1%, ±2%, ±5%, ±10%, ±20%
RF82	1/4W-20W	100Ω-1GΩ	