



TOKEN ELECTRONICS IND. CO., LTD.

HONESTY PERFECTION SHARING

Catalogue of High Voltage Resistors

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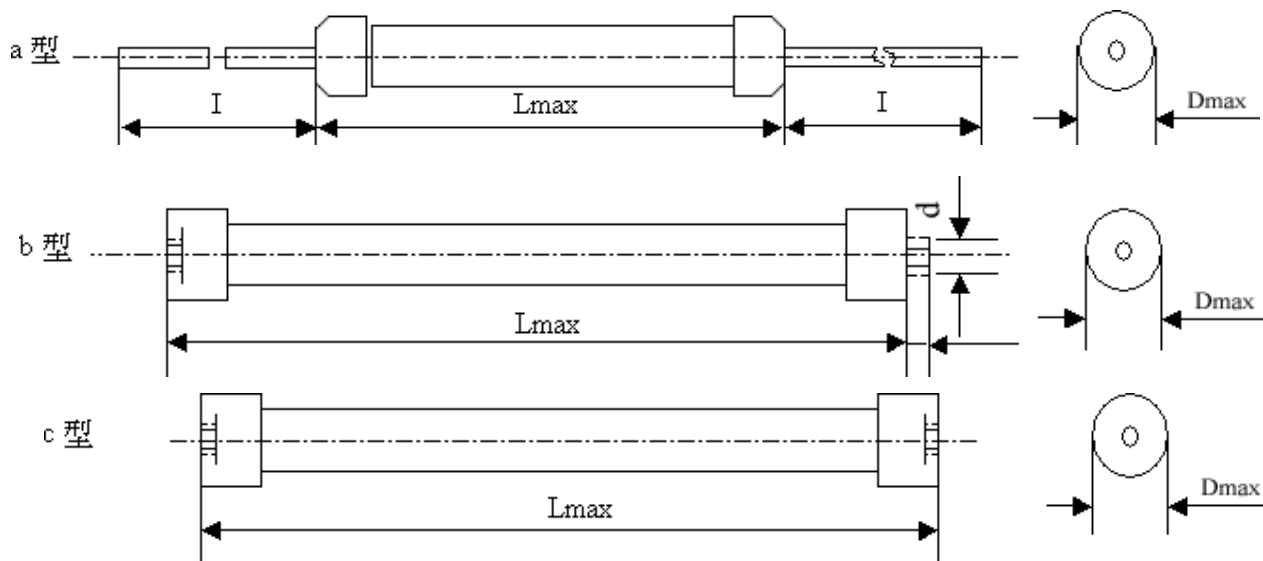


HIGH VOLTAGE GLAZE GLASS FILM RESISTORS (RI80)

High Voltage Glaze Glass Film Resistor

Features: High withstanding voltage and high short time over load,
Generally applies in AC / DC voltage impulse circuit and
high voltage impulse equipments.

High Voltage Resistor



RI80 General Specification

Part Number	Rated Wattage	Style	Dimensions				Resistance Range (MΩ)	Temp Coefficient (10 ⁻⁶ /°C)	Operating Temp °C	Resistance Tolerance %	Working Voltage (KV)
			L Max.	D Max.	I	D					
RI80-1	1	a	30 ±2	9	30 ±3	1	10-1000	≤ 200	-55°C ~ +70°C	G (±2%) J (±5%) K (±10%)	10
RI80-2	2	a	50 ±2	9	30 ±3	1	10-1000	≤ 200			15
RI80-5	5	a	100 ±2	9	30 ±3	1	10-1000	≤ 300			25
RI80-10	10	b	147 ±2	11	6	M4	10-1000	≤ 300			35
RI80-20	20	c	116 ±2	17			10-100	≤ 400			20
RI80-30	30	c	116 ±2	19			10-100	≤ 400			30
RI80-50	50	c	116 ±2	21			10-100	≤ 400			50
RI80-80	80	c	126 ±2	28			10-51	≤ 400			80
RI80-100	100	c	160 ±2	28			10-51	≤ 400			100

HOW TO ORDER

<u>RI80</u> ↓	<u>100</u> ↓	<u>c</u> ↓	<u>10MΩ</u> ↓	<u>K</u> ↓
Product Type.	Rated Power.	Style.	Resistance Value. (Ω)	Resistance Tolerance.



CHIP TYPE HIGH VOLTAGE GLAZE GLASS RESISTORS (RI82)

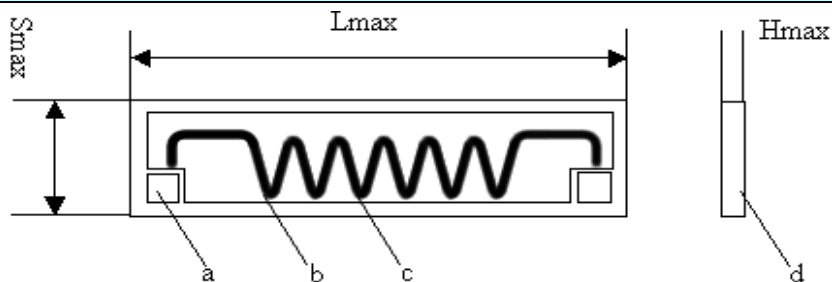
High Voltage Chip Type Glaze Glass Film Resistor

Features: High withstanding voltage and high short time over load,
Generally applies in AC / DC voltage impulse circuit and
high voltage impulse equipments.



Chip Type Dimension

- a. Silver Palladium Pole
- b. Resistent Film
- c. Insulation Coating
- d. 96%A1023 Ceramic Base

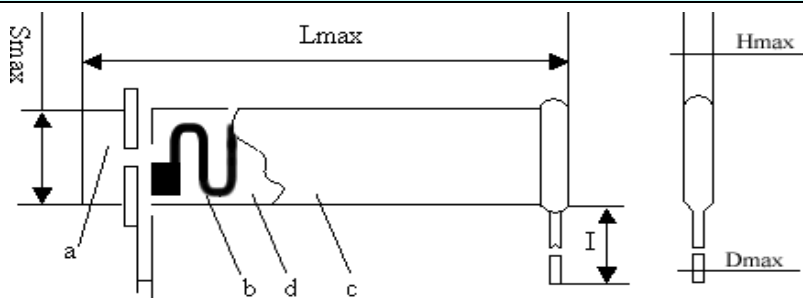


Chip Type General Specification

Part Number	Rated Wattage (W)	Style	Dimensions					Resistance Range (MΩ)	Temp Coefficient (10 ⁻⁶ /°C)	Resistance Tolerance %	Working Voltage (KV)
			L Max	D Max	H Max	I	d Max				
RI82-2	2	a	33	8	0.8			10-1000	≤ 200	J (±5%); K (±10%)	15
RI82-2	2	a	25	10	0.8					M (±20%)	

Dip Type Dimension

- A. Silver Palladium Pole
- B. Resistant Film
- C. Insulation Coating
- D. 96% A1023 Ceramic Base



Dip Type General Specification

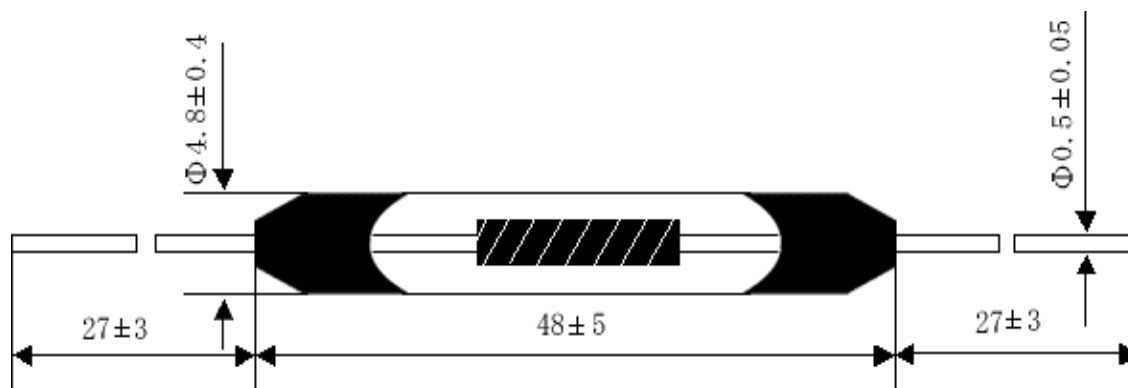
Part Number	Rated Wattage (W)	Style	Dimensions					Resistance Range (MΩ)	Temp Coefficient (10 ⁻⁶ /°C)	Resistance Tolerance	Working Voltage (KV)
			L Max.	S Max.	H Max.	I	d Max.				
RI82-0.125	0.125	a	27	7	2.5	25	0.56	10-1000	≤ 200	J (±5%) K (±10%) M (±20%)	10
RI82-0.16	0.166	a	22	4	1	20	0.56	1-51	≤ 200		4
RI82-0.25	0.25	a	35	7	2.5	35	0.56	10-1000	≤ 200		15
RI82-0.5	0.5	b	36	12	3	40	0.8	10-1000	≤ 200		15
RI82-1	1	c	46	13	3	45	0.8	10-1000	≤ 200		20
RI82-2	2	c	61	13	3	55	0.8	10-1000	≤ 200		25
RI82-5	5	c	82	22	3	60	0.8	10-200	≤ 300		25
RI82-10	10	c	100	25	4	80	0.8	10-1000	≤ 300		30



HIGH RESISTANCE VACUUM SPUTTERING ALLOY RESISTORS (RH1)

High Resistance Vacuum Sputtering Alloy Resistor

Features: High resistance, Generally applies in micro current at measurement circuit or equipments.



General Specification

Resistance Range	$1 \times 10^7 \sim 1 \times 10^{12} (\Omega)$
Resistance Tolerance	(J $\pm 5\%$) (K $\pm 10\%$)
Operating Temperature	-55°C ~ +80°C
Temperature Coefficient	+20°C ~ +85°C $2000 \times 10^{-6}/^\circ\text{C}$; +20 ~ -55°C $2400 \times 10^{-6}/^\circ\text{C}$
Damp Heat	$R \pm (5\%R + 0.1W)$
Working Voltage	600V



TOKEN MEANS QUALITY AND SERVICE

METAL CERAMIC RESISTORS (RMCA) (RMCB)

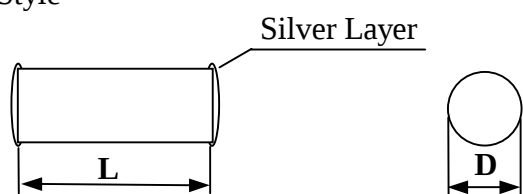
Metal Ceramic Resistors

Features: Suitable for noise suppressor of engine ignition system.
Reliable with non-disconnection failure.
Custom types are available.

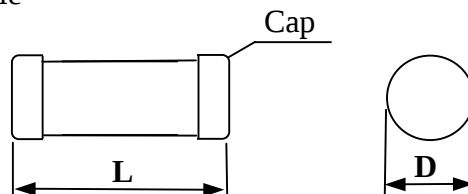


Style

A Style



B Style



General Specifications

Model	Style	Rated Wattage	Dimensions (mm)	
			L	D
RMC	A	1	10±1	4.0±0.4
	B		11±1	4.5±0.4
RMC	A	2	18±1	4.0±0.4
	B		19±1	4.5±0.4
RMC	A	3	24±1.5	4.0±0.4
	B		25±1.5	4.5±0.4

Electrical Performance

Item		RMCA, RMCB		
Power Rating at 25°C (W)		1	2	3
Operating Temp. Range		-40°C~155°C		
Rated Ambient Temp		+25°C		
Resistance Tolerance (%)		± 10 , ± 20	± 10 , ± 20	± 10 , ± 20
Resistance Range (Ω)		510Ω~33K	1K~56K	1K~100K
Max. Working Voltage (V)		300	350	400
T.C.R (PPM/°C)	25~40°C	0~3300	0~3300	0~3300
	25~155°C	0~2600	0~2600	0~2600
Max. Pulse Voltage (KV)		15	20	25
Moisture Resistance (%)		15	15	15

HOW TO ORDER

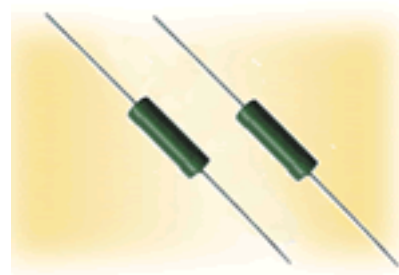
<u>RMC</u> ↓	<u>A</u> ↓	<u>2</u> ↓	<u>5KΩ</u> ↓	<u>M</u> ↓
Product Type.	Style.	Rated Power.	Resistance Value. (Ω)	Resistance Tolerance.



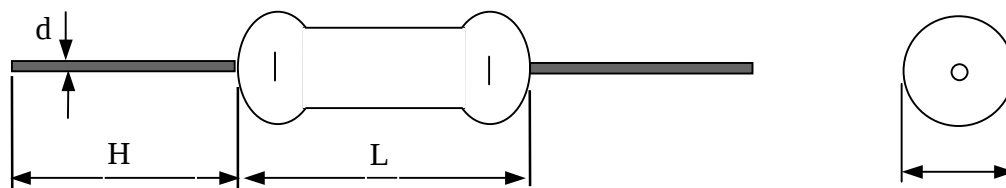
METAL CERAMIC RESISTORS FOR HIGH VOLTAGE SURGE CURRENT (RMCC)

Metal Ceramic Resistors

Features: Excellent characteristic against high voltage surge current.
Higher reliability for disconnection failure comparing to wire wound resistors and film resistors.
Suitable for high voltage circuits in X-ray generators and electron microscopes.



C style



General Specifications

Model	Style	Rated Wattage	Dimensions (mm)			
			L	D	H	d
RMC	C	1	12±1	4.5±0.5	25±2	0.8±0.05
RMC	C	2	20±1	4.5±0.5	25±2	0.8±0.05
RMC	C	3	26±1.5	4.5±0.5	25±2	0.8±0.05

Electrical Performance

Item		RMCC-1	RMCC-2	RMCC-3
Power Rating at 25°C (W)		1	2	3
Operating Temp. Range		-40°C~155°C		
Rated Ambient Temp		+25°C		
Resistance Tolerance (%)		± 10 , ± 20	± 10 , ± 20	± 10 , ± 20
Resistance Range (Ω)		510Ω~33K	1K~56K	1K~100K
Max. Working Voltage (V)		300	350	400
T.C.R (PPM/°C)	25~40°C	0~3300	0~3300	0~3300
	25~155°C	0~2600	0~2600	0~2600
Max. Pulse Voltage (KV)		15	20	25
Moisture Resistance (%)		15	15	15

HOW TO ORDER

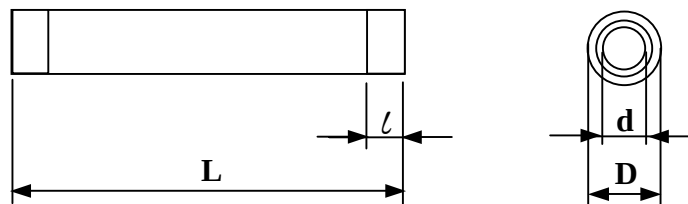
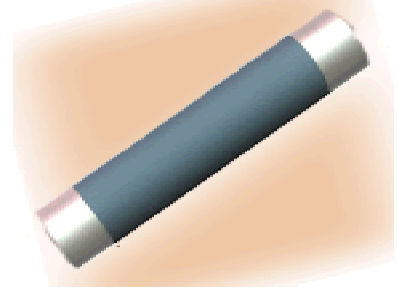
<u>RMC</u> ↓	<u>C</u> ↓	<u>2</u> ↓	<u>5K6Ω</u> ↓	<u>K</u> ↓
Product Type.	Style.	Rated Power.	Resistance Value. (Ω)	Resistance Tolerance.



ULTRA-HIGH FREQUENCY METAL OXIDE FILM RESISTORS (RY31A)

Ultra-High Frequency Metal Oxide Film Resistors

Features: RY31A, with the inner and outer surfaces coated with a special glass, features higher thermal resistance and larger electric power capacity for the compact volume. Unlike conventional wire wound resistors, the volumetric resistor will provide superior stability versus frequency and higher durability against transient voltage. RY31A can be suitable for the application with large current as well as high frequency circuit.



General Specifications

Power Rating at 70°C (W)	T.C.R. (PPM/°C)	Resistance (Ω)	Resistance Tolerance (%)	Max. Pulse Voltage (KV)	Operating Temp. Range (°C)	D max (mm)	L max (mm)	d max (mm)	l max (mm)
10	±400 (+20°C ~+125°C)	50	± 5%(J) ± 10%(K)	3.2	-55°C ~+125°C	Φ15.1	77	Φ10.7	5 ± 0.5
		75		4.0					
25		50		5.0		Φ25.1	121	Φ17.9	10 ± 1
		70		6.5					
50		50		7.5			162		
		75		8.7					
100		50		11		Φ35.1	202	Φ23.1	12 ± 1
		75		12.5					
150		50		12.5			302		20 ⁺² ₋₁
		75		12.5					

Note:

Resistance range is 1Ω~100Ω.

The resistors with the standard resistance values as showed as above.

That will be supplied with a shorter delivery.

HOW TO ORDER

<u>RY31A</u> ↓	<u>10</u> ↓	<u>50Ω</u> ↓	<u>K</u> ↓
Product Type.	Rated Power.	Resistance Value. (Ω)	Resistance Tolerance.