

# High-Frequency High Load Resistors

## A Perfect Choice for High Frequency Circuit Designs (RY31A)

### ▶ Preview

RY31A speciality MELF resistors combine the advanced pulse load capability and the suitability for RF applications in a single component.

They are the perfect choice in high frequency circuit designs where the parasitic inductance of regular, helical trimmed resistors can not be accepted, but where also pulse energies apply. Typical applications are in the fields of telecommunication equipment and industrial electronics.

RY31A - High Frequency Oxide Film, 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 type, the volumetric resistance will provide superior stability versus frequency and excellent durability against transient voltage. RY31A is suitable for the application with large current as well as high frequency circuit.

In very low resistance values, between 1.0 and 100 ohm, these are available in rated wattage 10W, 25W, 50W, 100W, and 150W packages.

The High-Frequency RY31A Series is RoHS compliant and lead free. For customized designs, tighter tolerances, non-standard technical requirements, or custom special applications, please contact our sales for more information.

### ▶ Features

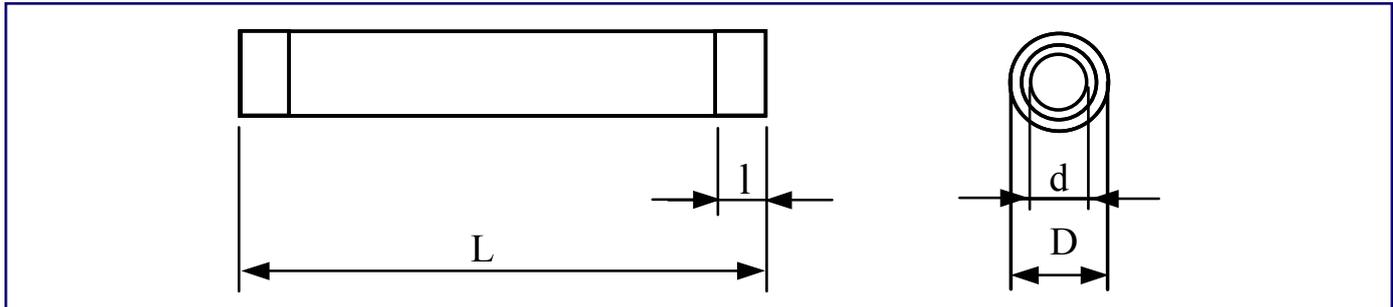
- Special Oxide Film technology
- Speciality product for RF applications
- Low-inductance non-helical trimmed product
- Lead (Pb)-free and RoHS compliant

### ▶ Applications

- Telecommunication equipment
- Industrial electronics



**▶ Electrical Characteristics (Unit: mm)**



Rated power (W)	T.C.R (PPM/°C)	Resistance range (Ω)	Tolerance (%)	Pulse test voltage (KV)	Ambient Temp. (70°C Full Power)	D max. (mm)	L max. (mm)	d max. (mm)	l max. (mm)
10	(+20°C ~ +125°C) ±400	50	±5(J) ±10(K)	3.2	-55°C ~ +125°C	Φ 15.1	77	Φ 10.7	5±0.5
		75		4					
25		50		5		Φ 25.1	121	Φ 17.9	10±1
		70		6.5					
50		50		7.5		Φ 35.1	162	Φ 23.1	12±1
		75		8.7					
100		50		11		Φ 35.1	202	Φ 23.1	20±2
		75		12.5					
150		50		12.5		Φ 35.1	302	Φ 23.1	20-1
		75		12.5					

Note: Resistance range is 1~100.

The resistors with the standard resistance values as showed as above. will be supplied with a shorter delivery.

**▶ How to Order**

RY31A  
**❶**

10W  
**❷**

50R  
**❸**

K  
**❹**

- ❶ Part Number: RY31A
- ❷ Rated Power (W): 10W, 25W, 50W, 100W, 150W
- ❸ Resistance Value (Ω)

Code	Resistance Value (Ω)
51R	51Ω
56R	56Ω
62R	62Ω
68R	68Ω
75R	75Ω

- ❹ Resistance Tolerance (%)

Code	Resistance Tolerance
J	±5%
K	±10%

*Back to 1st Page - High Load & High Frequency Resistors (RY31A)*