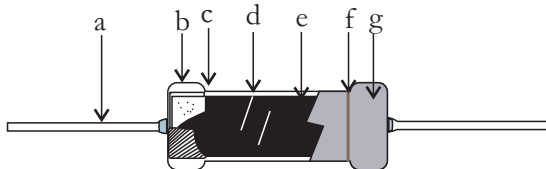


## ● Features

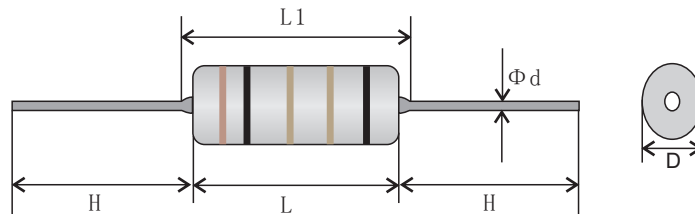
- I Function as a resistor in normal operation condition.
- II Quick fusing protects circuit from excessive over load.
- III Approvals awarded; UL 1412 File No.E341249.
- IV Products meet EU-RoHS.

## ● Construction



a	Lead wire
b	Cap
c	Ceramic base
d	Helical cutting groove
e	Film
f	Marking or color code
g	Insulation coat

## ● Dimensions



Type	Dimensions(mm)					Weight(g) (1000pcs)
	L	L1 Max	D	Φd	H	
RFU 1/6, RFS 1/4	3.3±0.3	4	1.7±0.3	0.45 ± 0.05	27 ± 3	120
RFU 1/4, RFU 1/3, RFS 1/2	6.0±0.3	7	2.4±0.3	0.6 ± 0.05	28 ± 3	218
RFU 1/2, RFS 1	9±0.5	11	3.0±0.5		30 ± 3	320
RFU 1, RFS 2	12±1	15	4.5±0.5	0.8 ± 0.05	38 ± 3	780
RFU 2, RFS 3	16±1	18	5.5±0.5			1450

## ● Ordering Information

Example:

RFU/S	14	J	R100
(1)	(2)	(3)	(4)
Series Name	Power Rating	Resistance Tolerance	Resistance

(1)Type:RFU/S SERIES

(2)Power Rating: 14=1/4W、12=1/2W、1=1W、2=2W、3=3W

(3)Tolerance: J= ± 5%

(4)Resistance Value:R100=0.1R、1R00=1Ω、10R0=10Ω、100R0=100Ω

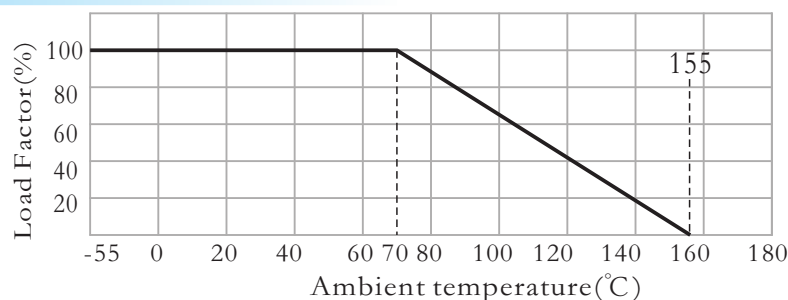
## ● Reference Standards

JISC 5201-1

## Applications And Ratings

Type	Resistance Range( $\Omega$ )	MaxWorking Voltage	MaxOverload Voltage	Dielectric Withstanding Voltage	T.C.R
	J $\pm$ 5%(E24)				
RFU 1/6,RFS 1/4	0.1-1K	100V	150V	200V	$\pm 100\text{PPM}/^\circ\text{C}$
RFU 1/4,RFU 1/3	0.1-15K	250V	300V	250V	
RFS 1/2,RFS 1	0.1-33K	250V	300V	250V	
RFU1/2	0.1-4.7K	250V	300V	300V	
RFU 1,RFU 2,RFS 2,RFS 3		350V	500V	300V	

## Derating Curve



## Fusing Characteristics(Reference)

FUSING characteristics (Residual resistance  $\geq 100$  times nominal resistance)

Rated Power	Resistance Range	$\sqrt{40\text{PR}}$	$\sqrt{30\text{PR}}$	$\sqrt{25\text{PR}}$	$\sqrt{16\text{PR}}$	Fusing Time
RFU1/6W、RFS1/4W	0.10-1K $\Omega$	0.10-0.18 $\Omega$	0.2-0.47 $\Omega$	0.51-1K $\Omega$	... ..	60sMAX
RFU1/4W、RFU1/3W	0.10-15K $\Omega$	0.10-0.22 $\Omega$	... ..	0.24-9.1 $\Omega$	10-15K $\Omega$	60sMAX
RFS1/2W	0.10-33K $\Omega$	... ..	... ..	0.10-1.0 $\Omega$	1.1-33K $\Omega$	60sMAX
RFS1W	0.10-33K $\Omega$	... ..	... ..	0.10-1.0 $\Omega$	1.1-33K $\Omega$	60sMAX
RFU1/2W	0.10-4.7K $\Omega$	0.10-0.33 $\Omega$	0.47-0.91 $\Omega$	1.0-9.1 $\Omega$	10-4.7K $\Omega$	60sMAX
RFU1W、RFS2W	0.10-4.7K $\Omega$	... ..	... ..	0.10-1.0 $\Omega$	1.1-4.7K $\Omega$	60sMAX
RFU2W、RFS3W	0.10-4.7K $\Omega$	... ..	... ..	0.10-1.0 $\Omega$	1.1-4.7K $\Omega$	60sMAX

## Performance

Test Items	Performance Requirements	Test Methods(JIS C 5201-1)
Resistance	Within specified tolerance	Measuring points are 10mm from the end cap
T.C.R.	Within specified T.C.R	Room temperature+100 $^\circ\text{C}$
Short time overload	$\pm (2\%+0.05\Omega)$	4 times the rated power for 5 seconds
Load life	$\pm (5\%+0.1\Omega)$	Rated voltage at 70 $^\circ\text{C}$ for 1,000 hours 1.5hr ON/0.5hr OFF Cycles
Load life in humidity	$\pm (5\%+0.1\Omega)$	Rated voltage at 40 $^\circ\text{C}$ , 95%RH for 1,000 hours
Moisture resistance	$\pm (1\%+0.05\Omega)$	40 $^\circ\text{C}$ , 95%RH for 240 hours
Temperature cycle	$\pm (1\%+0.05\Omega)$	5 cycles for -25 $^\circ\text{C}$ (30min);room temp.(30min) ~+85 $^\circ\text{C}$ (30min)room temp.(30min)
Solderability	95%(min)coverage	Temp. of solder 245 $^\circ\text{C} \pm 5^\circ\text{C}$ duration of immersion 3s $\pm 0.5\text{s}$
Resistance to soldering heat	$\pm (1\%+0.05\Omega)$	260 $^\circ\text{C} \pm 5^\circ\text{C}$ for 10 seconds 350 $^\circ\text{C} \pm 10^\circ\text{C}$ for 3.5 seconds
Insulation resistance	> 1,000M $\Omega$	500V insulation test 1min.