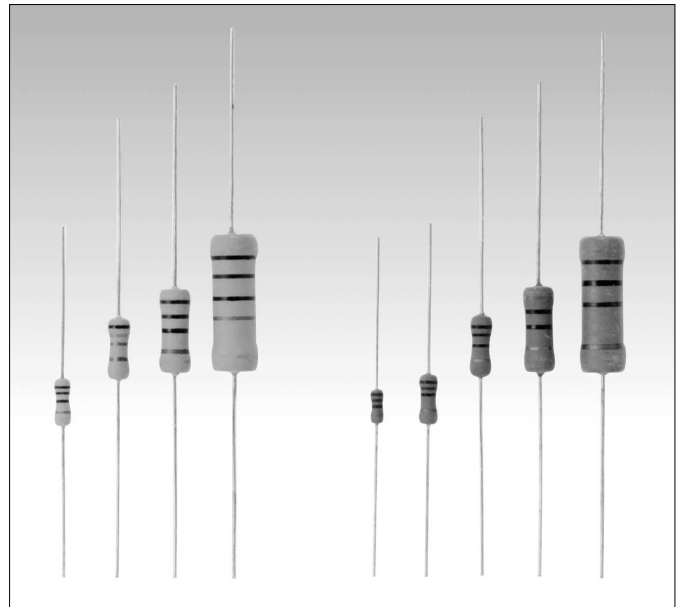


RSI-1/2, 1, 2, 3, 1/2S, 1S, 2S, 3S, 5S

●Features

1. Available in a variety of sizes from 1/2W.
2. Widely used in amplification, high frequency and power source circuit land also in general purpose electric applications.



●Dimensions

Style	L	D	H	d	*Unit Weight/pc.
RSI-1/2S	6.5±0.5	2.5±0.5	30±3	0.6±0.05	0.22g
RSI-1/2	9.0±1.0	3.5±1.0			0.45g
RSI-1S					
RSI-1	0.73g				
RSI-2S	16.0±1.0	6.0±1.0	38±3	0.8±0.05	1.25g
RSI-2	25.0±1.0	9.0±1.0			1.4g
RSI-3S	3.7g				
RSI-3	4.2g				
RSI-5S					

Unit : mm
*Values For Reference

●Product Classification

Example

RSI — 1S 103 J B

①Product Type ②Rated Power ③Rated Resistance ④Tolerance on Rated Resistance ⑤Packaging

Style

①Product Type	②Rated power	
	Code	Rated power
1/2·1/2S		0.5W
1·1S		1.0W
2·2S		2.0W
3·3S		3.0W
5S		5.0W

③Rated Resistance
3Digit : E24 Series e.g : 103=10k ohm

④Tolerance on Rated Resistance	
Code	Tolerance on Rated Resistance
J	±5%

*⑤Packaging	
Code	Packaging
B	Bulk(Straight)
HB	Horizontal Forming (Free-Standing)
TB	52mm Width Taping(Fan Fold Box)
TL	52mm Width Taping(Reel)

*Refer to Taping and Packaging information in page 62, 63, 64
Contact us for information on the details of processing and packing.
The code numbers may be added to the codes in some cases.

FIXED METAL OXIDE FILM RESISTORS RSI-1/2, 1, 2, 3, 1/2S, 1S, 2S, 3S, 5S

●Ratings

Style	Rated Dissipation at 70°C W	Limiting Element Voltage V	Rated Resistance Range	Tolerance on Rated Resistance	Preferred Number Series for Resistors	Isolation Voltage V	Category Temperature Range °C
RSI-1/2S	0.5	250	0.1 ohm-100k ohm	J(±5%)	E24 Series	500	-55-+200
RSI-1/2			0.1 ohm-330k ohm				
RSI-1S	1.0	350	0.1 ohm-510k ohm				
RSI-1			0.22 ohm-470k ohm				
RSI-2S	2.0		0.47 ohm-100k ohm				
RSI-2							
RSI-3S	3.0	500	0.1 ohm-100k ohm				
RSI-3							
RSI-5S	5.0					1000	

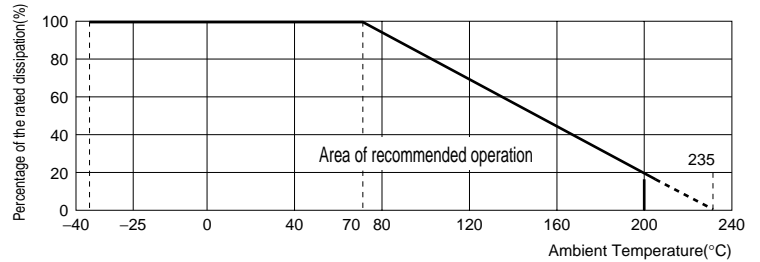
Note.1 Rated Voltage = $\sqrt{(\text{Rated Power}) \times (\text{Rated Resistance})}$. (d.c. or a.c. r.m.s. Voltage)

Note.2 Limiting Element Voltage can only be applied to resistors when the resistance value is equal to or higher than the critical resistance value.

Note.3 RSP Series (0.22-100 Ohm) with upgraded performance in surge test are available too, contact the Sales Dept for detail.

●Derating Curve

The derated values of dissipation at temperature in excess of 70°C shall be as indicated by the following Curve.



●Climatic Category

55/200/56

- Lower Category Temperature -55°C
- Upper Category Temperature +200°C
- Duration of the Damp heat, Steady-State Test 56days

●Performance Characteristics JIS C 5201-1 : 1998

Description	Requirements	Test Methods
Voltage proof	No breakdown or flashover	Clause 4.7 V-block method RSI-1/2, 1/2S 500V a.c., 60s RSI-1, 2, 1S, 2S, 3S 700V a.c., 60s RSI-3, 5S 1,000V a.c., 60s
Variation of resistance with Temperature	T.C.R : $\pm 350 \times 10^{-6} / ^\circ\text{C}$	Clause 4.8 Measuring temperature : +20°C/-55°C/ +20°C/+155°C/+20°C
Overload	$\Delta R \leq \pm(0.5\% + 0.05 \text{ ohm})$ No visible damage, legible marking	Clause 4.13 The applied voltage shall be 2.5 times of the rated voltage or twice of the limiting element voltage, whichever is the less severe, 5s
Temperature rise	$\Delta \theta \leq 235^\circ\text{C}$	Clause 4.14 \times Rated voltage
Robustness of Terminations	Tensile $\Delta R \pm(1\% + 0.05 \text{ ohm})$ No visible damage	Clause 4.16.2 10N for 5-10s
	Bending $\Delta R \leq \pm(1\% + 0.05 \text{ ohm})$ No visible damage	Clause 4.16.3 5N twice
	Torsion $\Delta R \leq \pm(1\% + 0.05 \text{ ohm})$ No visible damage	Clause 4.16.4 180°C 2 rotation
Solderability	In accordance with Clause 4.17.4.5	Clause 4.17 235°C, 2s
Resistance to soldering heat	$\Delta R \leq \pm(1\% + 0.05 \text{ ohm})$ No visible damage, legible marking	Clause 4.18 After immersion into the flux, the immersion into solder shall be carried out in solder bath at 350°C for 3.5s.
Rapid change of temperature	$\Delta R \leq \pm(1\% + 0.05 \text{ ohm})$ No visible damage	Clause 4.19 5 cycles between -55°C and +200°C.
Climatic sequence	$\Delta R \leq \pm(5\% + 0.05 \text{ ohm})$ Insulation resistance : $R \geq 100\text{M ohm}$ No visible damage	Clause 4.23 Dry/Damp heat(12+12h cycle), first cycle./ Cold/Damp heat(12+12h cycle), remaining cycle./ D.C.Load.
Damp test, steady state	$\Delta R \leq \pm(5\% + 0.1 \text{ ohm})$ Insulation resistance : $R \geq 100\text{M ohm}$ No visible damage, legible marking	Clause 4.24 40°C 95%R.H. 56days, test a), b) and c) of Clause 4.24.2.1
Endurance at 70°C	$\Delta R \leq \pm(5\% + 0.1 \text{ ohm})$ No visible damage Insulation resistance : $R \geq 1\text{G ohm}$	Clause 4.25.1 Rated voltage, 1.5h "ON", 0.5h "OFF", 70°C, 1000h.
Endurance at the upper Category temperature	$\Delta R \leq \pm(5\% + 0.1 \text{ ohm})$ No visible damage Insulation resistance : $R \geq 1\text{G ohm}$	Clause 4.25.3 200°C, no-load, 1000h.