

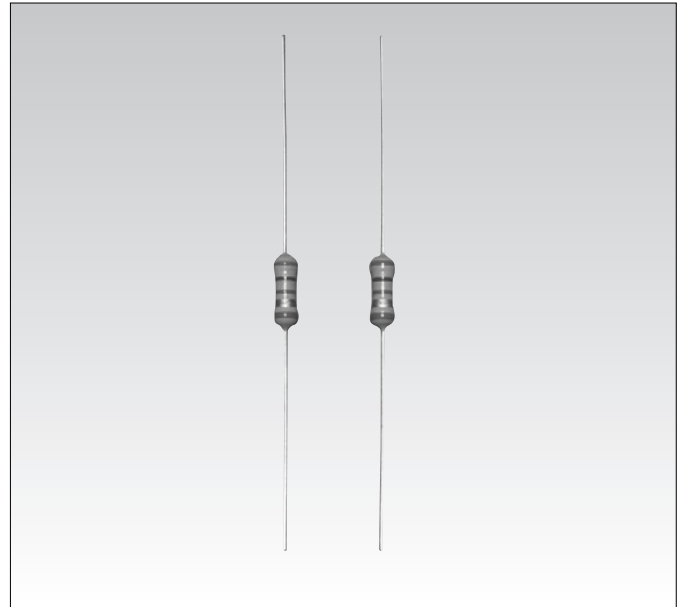
RNV

●Features

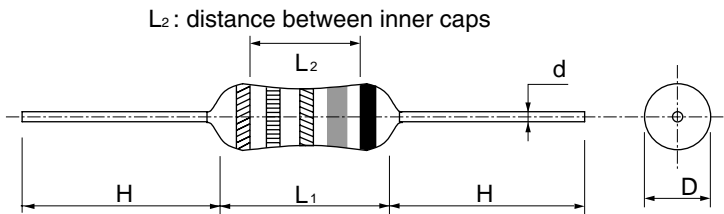
1. High maximum working voltage, excellent for surge applications.
2. IEC Publ. 65 applies to RNV1.
3. Approved to UL, c-UL, BSI and VDE standards.
 - UL, c-UL, File No. E151897
510k ohm~910k ohm : 125V max.
960k ohm~11M ohm : 250V max.
 - BSI No.7778
BS EN 60065:1994 (BS 415:1994) : Sub-clauses 9.3.5,14.1 (a) and (b)
 - VDE No.VDE-Reg.-Nr.10149
DIN EN VDE (EN 60065:1994-04,14.1a)



4. Stability Class : 5%



●Dimensions



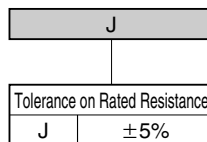
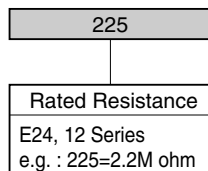
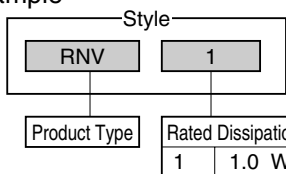
Unit : mm

Style	L1	L2	D	H	d	*Unit Weight/pc.
RNV 1	12.0 ^{+1.0} _{-1.5}	6.0min.	4.0±1.0	37±2	0.7±0.1	703mg

*Value for Reference

●Part Number Description

Example



B	
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*Packaging

B	Bulk (Straight)
H	Horizontal Forming
HB	Horizontal Forming (Free-Standing)
TB	52 mm Width Tape (Ammo Box)
TD	52 mm Width Tape (Reel)

*Refer to Tape and Packaging information on pages 64 and 65. Some code numbers may be added after packing codes.

FIXED HIGH VOLTAGE RESISTORS

RNV

●Ratings

Style	Rated Dissipation at 70°C W	Limiting Element Voltage V	Temperature Coefficient of Resistance 10 ⁴ /°C	Rated Resistance Range	Tolerance on Rated Resistance	Preferred Number Series for Resistors	Isolation Voltage V	Category Temperature Range °C
RNV 1	1.0	2,000	±350	470k ohm ~ 4.7M ohm	J (±5%)	E12	500	-55~+155
			-600~+500	5.6M ohm ~ 12M ohm				

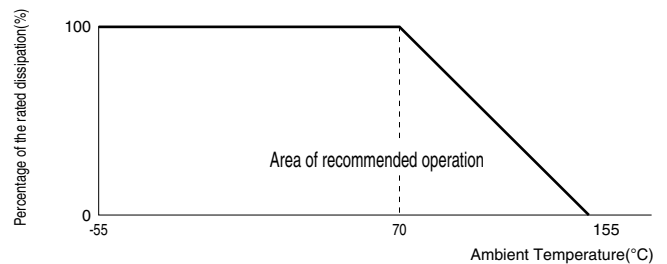
Note1. Rated Voltage = $\sqrt{(\text{Rated Dissipation}) \times (\text{Rated Resistance})}$. (d.c. or a.c. r.m.s. Voltage)

Note2. Limiting Element Voltage can only be applied to resistors when the resistance value is equal to or higher than the critical resistance value.

Note3. Critical Resistance Value is the resistance value at which the rated voltage is equal to the limiting element voltage.

●Derating Curve

The derated values of dissipation for temperatures in excess of 70°C shall be indicated by the following Curve.



●Climatic Category

55/155/56

Lower Category Temperature -55°C
 Upper Category Temperature +155°C
 Duration of the Damp heat, Steady-State Test 56 days

●Performance Characteristics JIS C 5201-1 : 1998

Description	Requirements	Test Methods
Voltage proof	No breakdown or flashover	Clause 4.7 V-block method 500Va.c.,60s
Variation of resistance with temperature	See Ratings Table	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 4,000V whichever is the less severe, 5s.
Overloadability	Within ±20%	Conditioned at 40°C, 95%R.H., for 21 days. : Charged 10kV to capacitor (1,000pF) for 1 second and discharge for 4 seconds, total of 50 cycles.
Robustness of terminations	Tensile $\Delta R_{\leq \pm}(1\%+0.05 \text{ ohm})$ 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 +155°C.
Climatic sequence	$\Delta R_{\leq \pm}(5\%+0.1 \text{ ohm})$ 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., 56 days, 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, 1,000h.
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 4.25.3 155°C, no-load, 1,000h.