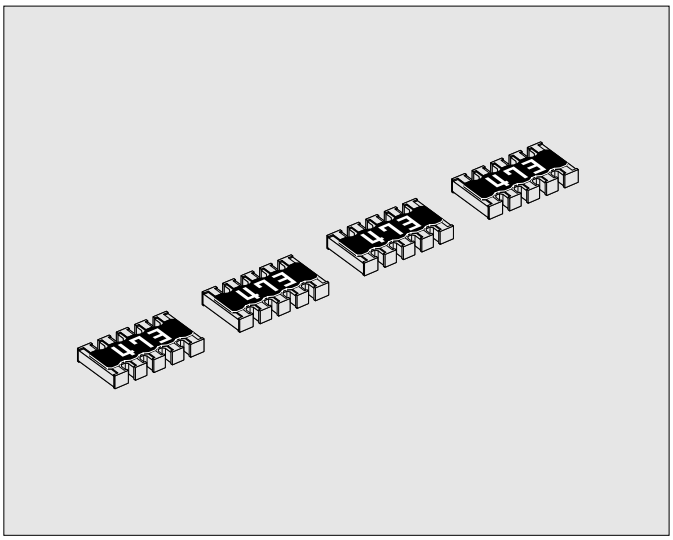
RAC168U

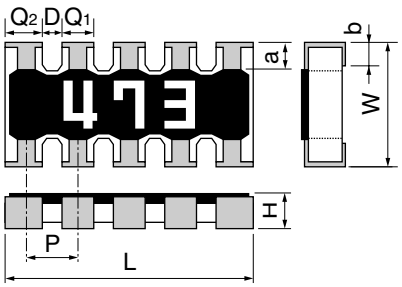
•Features

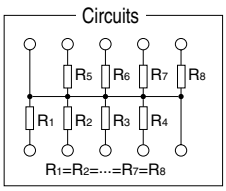
1. Highly suitable for the purposes of pull-up and pull-down.
2. Easy to handle because of no specified direction for mounting due to the symmetrical position of common terminals.

•Stability Class : 5%



•Dimensions and Circuits





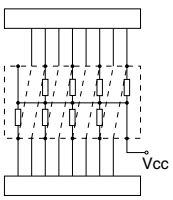
Rated resistance is marked with 3-digit on the over coating.

Unit : mm

Style	Terminal Style	L	W	H	D	Q_1	*Q_2	a	b	*P	*Unit weight/pc.
RAC168U	**C**	3.2±0.2	1.6±0.1	0.5±0.1	0.32±0.10	0.32±0.10	0.53	0.3 ±0.2	0.3±0.15	0.64	7.6mg

*Values for reference

•Application Examples



- Making the parallel 8-Elements resister for pull-up / pull-down into one chip.
- Ideal for high density SMT applications as direct mounting on the bus line is possible.

•Part Number Description

Example

Style								
RAC	16	8	U	103	J	C	TP

Product Type

No. of Elements

8	8-Elements

Rated Resistance

E24 Series
e.g. : 103=10k ohm

Terminal Style

C	Convex Type	With corner	RAC168U

Size

16	W:1.6mm

Circuits

U	Common Electrode 2: Same Type	RAC168U

Tolerance on Rated Resistance

J	±5%

*** Packaging & Standard Qty. (Min.)**

B	Bulk (Loose Package)	1,000pcs.
TP	Paper Tape	5,000pcs.

*Refer to Tape and Packaging information on pages 46 and 47.

FIXED CHIP RESISTOR NETWORKS; RECTANGULAR TYPE RAC168U

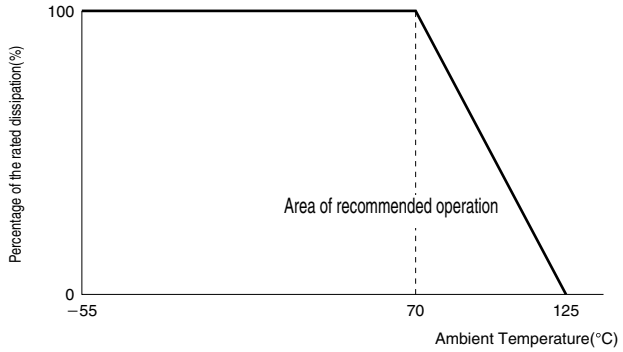
●Ratings

Style	Rated Dissipation at 70°C W	Rated Resistance Range	Tolerance on Rated Resistance	Temperature Coefficient of Resistance 10^{-6}/°C	Limiting Element Voltage V	Preferred Number Series for Resistors	Isolation Voltage V	Category Temperature Range °C
RAC168U	0.063	10Ω～18Ω	J(±5%)	±250	25	E24	100	−55～+125
		20Ω～1MΩ		±200				

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

55/125/56

Lower Category Temperature	−55°C
Upper Category Temperature	+125°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 R≥1G ohm	Clause 4.7 100Va.c.,60s
Variation of resistance with temperature	See Ratings Table	Clause 4.8 Measuring temperature : +20°C/−55°C/ +20°C/+125°C/+20°C
Overload	ΔR≤±(1%+0.05 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, 2s.
Solderability	In accordance with Clause 4.17.4.5	Clause 4.17 235°C, 2s
Resistance to soldering heat	ΔR≤±(1%+0.05 ohm)	Clause 4.18 After immersion into the flux, the immersion into solder shall be carried out in Solder bath at 260°C for 5s.
Rapid change of temperature	ΔR≤±(1%+0.05 ohm) No visible damage	Clause 4.19 5 cycles between −55°C and +125°C.
Climatic sequence	ΔR≤±(5%+0.1 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	ΔR≤±(5%+0.1 ohm) No visible damage, legible marking	Clause 4.24 40°C, 95%R.H., 56 days, test a) of Clause 4.24.2.1
Endurance at 70°C	ΔR≤±(5%+0.1 ohm) No visible damage	Clause 4.25.1 Rated voltage, 1.5h"ON", 0.5h"OFF", 70°C, 1,000h.
Endurance at the upper category temperature	ΔR≤±(5%+0.1 ohm) No visible damage	Clause 4.25.3 125°C, no-load, 1,000h.
Adhesion	No visible damage	Clause 4.32 5N, 10s
Bend strength of the face plating	ΔR≤±(1%+0.05 ohm)	Clause 4.33 Amount of bend : 3 mm