NETWORKS (HIGH VOLTAGE DIVIDER)

RK92D Thick Film Resistors For High Voltage (High-precision high voltage divider)



Coating color : Black Marking : Alphanumeric

Features

- High-precision high voltage divider for high voltage circuits.Thin SIP shape.
- The flame retardant coats corresponding to UL94V-0 are used.
- Higher relative accuracy of resistance value is possible with one package.
- \bullet Thick film resistors (RuO_2) ensure high stabilities in life and change in aging.
- Products with lead free termination meet EU-RoHS requirements. EU-RoHS regulation is not intended for Pb-glass contained in electrode, resistor element and glass.

Applications

- PPCs and LBPs for power supply circuits
- High voltage power supplies of analyzing devices and medical equipment.
- High voltage detecting circuits for smart meters and power monitoring system.

Construction



Dimensions^{*1} mm(inch)



	RK92	D	3	2	C	4		D	754/622	F
	Product Code	Туре	Terminal pitch 1	Terminal pitch 2	Height symbol	Voltage symbol	Manufacturing serial number (Internal circuit is indicated by A00)	Terminal symbol	Resistance symbol	Resistance Tolerance
	RK92 (Standard)	D	3	2	С	4	Nil	D	(R1+R2)/R2	F
Ex.**1)	RK92 (Custom)	D	8	2	С	Nil	A00	D	Nil	Nil

Type Designation

Ratings^{*2}

Style	Max. Working Vol. symbol	Nominal Resistance	Power Rating		Resistance (Ω)		Resistance	Relative Resistance ratio		T.C.R. (×10 ⁻⁶ /K)		Max Working	Poted Ambient	Operating Temp
			R1	R2	(R1+R2) E24	R2	Tolerance (R1+R2)	(R1+R2)/R2	Tolerance	Absolute	Relative	Voltage	Temp.	Range
32C	4	754/622	0.5W 0.2W**	0.2W**3	750k	6.25k	F:±1%	120	0.2%	±100	50	4kV	70℃	−40℃~ +125℃
		205/103			2M	10k		200						
		136/263			13M	26k		500						
		336/333			33M	33k		1000						

2 Please consult with us about custom rating products.

**3 0.2W is a calculated value based on designing. The actual value is smaller than 0.2W according to the relative resistance ratio in the catalog.

Derating Curve



For resistors operated at an ambient temperature of $70^\circ\!C$ or higher, the power shall be derated in accordance with the above derating curve.

Performance

Test Items	Performance Requirements $\Delta R \pm (\% + 0.05\Omega)$		Test Methods				
	Limit	Typical					
Resistance	Within specified tolerance		25°C				
T.C.R.	Within specified T.C.R.		+25°C/+125°C				
Resistance to soldering heat	±0.5	±0.2	260℃±5℃, 10s±1s				
Rapid change of temperature	±0.5	±0.2	-40°C (30min.)/+125°C (30min.) 5 cycles				
Moisture Resistance	±2	±1	40°C±2°C, 90%~95%RH, 1000h 1.5h ON/0.5h OFF cycle				
Endurance	±2	±1	70°C±2°C, 1000h 1.5h ON/0.5h OFF cycle				