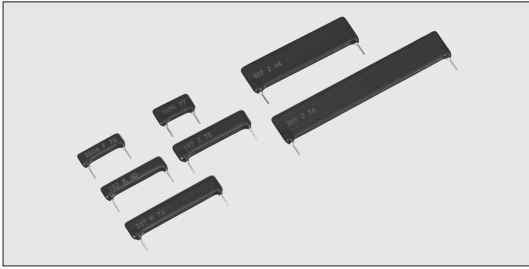
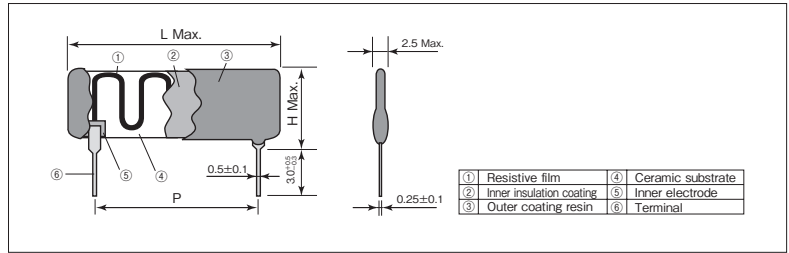


RK92 Thick Film Resistors For High Voltage



Coating color : Black
Marking : Alphanumeric

Construction



Features

- High resistance resistors for high voltage circuits.
- Thin SIP shape.
- The flame retardant coats corresponding to UL94V-0 are used.
- Thick film resistors (RuO₂) 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
- LBPs
- Air conditioners
- Microwave ovens
- High voltage circuits for fly-back transformers, etc.

Reference Standards

IEC 60115-1
JIS C 5201-1

Dimensions

Style	Max. Workin Vol. Symbol	Dimensions (mm)			Weight (g) (1000pcs)	
		L Max.	H Max.	P±0.2		
4L	Nil	12.7	5.08	10.16	196	
5L	Nil	15.3		12.7	227	
6L	Nil	17.8		15.24	258	
3C	Nil or 4	10.8	6.5	7.62	194	
4C	5	13.3		10.16	241	
5C	Nil or 6	15.8		12.7	286	
6C	7	18.4		15.24	331	
7C	Nil or 8	20.9		17.78	377	
8C	Nil or 9	23.5		20.32	422	
9C	Nil	26.0		22.86	468	
11X	Nil	31.0		10	27.94	1007
18X	Nil	48.9			45.72	1672
18D	Nil	48.9	45.72		2373	

Type Designation

Example

RK92	3C	4	D	1004	F	50
Product Code	Style	Max. Working Voltage symbol	Terminal Surface Material	Nominal Resistance	Resistance Tolerance	T.C.R. (×10 ⁻⁶ /K)
RK92 (Standard)	4L 5L 6L 3C 5C 7C 8C 9C 11X 18X 18D	Nil	D: SnAgCu (L: Sn/Pb)	F: 4digits G, J, K, M: 3digits	F: ±1% G: ±2% J: ±5% K: ±10% M: ±20%	Nil
RK92 (Precision)	18D 3C 4C 5C 6C 7C 8C	Nil 4 (kV) 5 (kV) 6 (kV) 7 (kV) 8 (kV) 9 (kV)	D: SnAgCu	D, F: 4digits	D: ±0.5% F: ±1%	100 100 50

Contact us when you have control request for environmental hazardous material other than the substance specified by EU-RoHS.

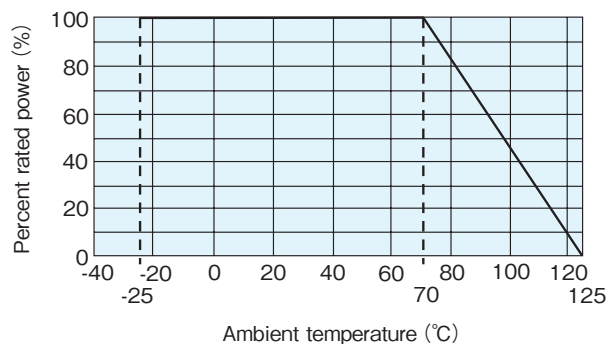
The terminal surface material lead free is standard.

Ratings

Style	Max. Working Vol. symbol	Power Rating	Resistance Range (Ω)						T.C.R. (×10 ⁻⁶ /K)	Max. Working Voltage	Rated Ambient Temp.	Operating Temp. Range	
			E12 · 2×10 ³ · 3×10 ³ · 4×10 ³ · 5×10 ³										
			D: ±0.5%	F: ±1%	G: ±2%	J: ±5%	K: ±10%	M: ±20%					
4L	Nil	0.5W	—	2M~10M	2M~10M	—	—	—	±300	1kV	+70°C	-25°C~+125°C	
5L	Nil	0.5W	—	1M~500M	1M~500M	1M~1G	1M~1G	1M~1G					
6L	Nil	0.6W	—	1M~500M	1M~500M	1M~1G	1M~1G	1M~1G					
3C	Nil	0.5W	—	1M~500M	1M~500M	1M~1G	1M~1G	1M~1G					
5C	Nil	0.75W	—	1M~500M	1M~500M	1M~1G	1M~1G	1M~1G					
7C	Nil	0.85W	—	1M~500M	1M~500M	1M~1G	1M~1G	1M~1G					
8C	Nil	1.0W	—	1M~500M	1M~500M	1M~1G	1M~1G	1M~1G					
9C	Nil	1.1W	—	1M~500M	1M~500M	1M~1G	1M~1G	1M~1G					
11X	Nil	1.7W	—	1M~500M	1M~500M	1M~1G	1M~1G	1M~1G					
18X	Nil	2.7W	—	1M~500M	1M~500M	1M~1G	1M~1G	1M~1G					
18D	Nil	4W	1M~100M	1M~500M	1M~500M	1M~1G	1M~1G	1M~1G	±100	15kV			
3C	4	0.5W	1M~100M	1M~100M	—	—	—	—					
4C	5	0.6W	1M~100M	1M~100M	—	—	—	—					
5C	6	0.75W	1M~150M	1M~150M	—	—	—	—					
6C	7	0.8W	1M~150M	1M~150M	—	—	—	—					
7C	8	0.85W	1M~200M	1M~200M	—	—	—	—					
8C	9	1W	1M~200M	1M~200M	—	—	—	—					
										±50		4kV 5kV 6kV 7kV 8kV 9kV	

Rated voltage = √(Power Rating × Resistance value) or Max. working voltage, whichever is lower.

Derating Curve



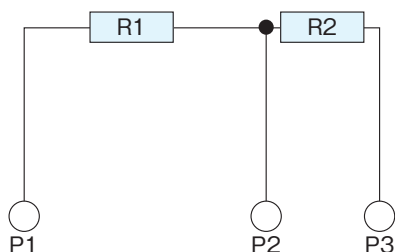
For resistors operated at an ambient temperature of 70°C or higher, the power shall be derated in accordance with the above derating curve.

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	1	0.5	260°C ± 5°C, 10s ± 1s
Rapid change of temperature	1	0.5	-25°C (30min.) / +125°C (30min.) 5 cycles
Moisture resistance	5	3	40°C ± 2°C, 90%~95%RH, 1000h
Endurance	5	3	25°C 1000h Rated voltage

3 terminals product

- Circuit Schematics



- Resistance Value The partial Ratio, Terminal pitch, The dimensions
Please refer to us

Precaution for Use

- The conditions for lead-free terminal resistors are set up at 260°C Max. within 10s