

RVC Series — Medium Voltage Thick Film Chip Resistors



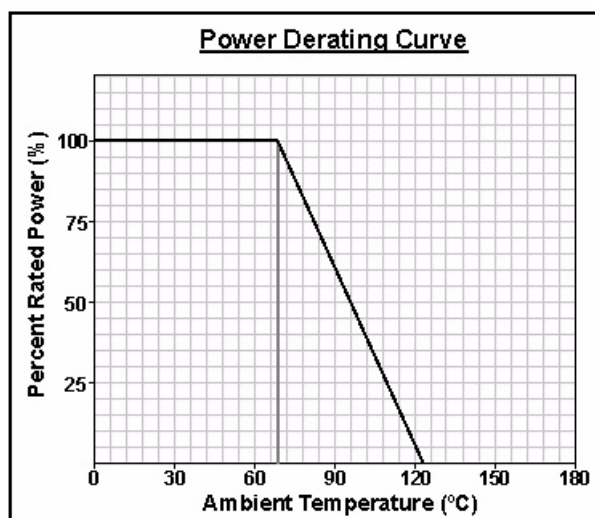
Features

- Voltage ratings 2x or more compared to standard chip resistors
- Values up to 51M
- Proportionally higher pulse power capability
- RoHS compliant / lead-free



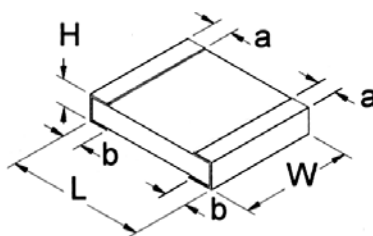
Electrical Specifications

Type / Code	Power Rating (Watts) @ 70°C	Limiting Element Voltage	Resistance Temperature Coefficient	Ohmic Range and Tolerance	
				1%	5%, 10%
RVC 0603	0.100W	200V	±200 ppm/°C ±100 ppm/°C	47Ω – 464Ω 470Ω – 10MΩ	47Ω – 464Ω 470Ω – 10MΩ
RVC 0805	0.125W	400V	±200 ppm/°C ±100 ppm/°C	47Ω – 97.6Ω 100Ω – 10MΩ	47Ω – 97.6Ω 100Ω – 51MΩ
RVC 1206	0.250W	500V	±200 ppm/°C ±100 ppm/°C	47Ω – 97.6Ω 100Ω – 10MΩ	47Ω – 97.6Ω 100Ω – 51MΩ
RVC 2010	0.500W	500V	±200 ppm/°C ±100 ppm/°C	47Ω – 464Ω 470Ω – 20MΩ	47Ω – 464Ω 470Ω – 51MΩ
RVC 2512	1.500W	800V	±500 ppm/°C ~ ±200 ppm/°C ±200 ppm/°C ±100 ppm/°C	47Ω – 97.6Ω 100Ω – 549Ω 560Ω – 20MΩ	47Ω – 97.6Ω 100Ω – 549Ω 560Ω – 51MΩ



How to Order

RVC		0805		10M		5%		R	
SEI Type		Code		Nominal Resistance		Tolerance		Packaging	
SEI Type	Description	Code	Wattage	Tolerance	Values	SEI Type	Pkg Qty	Description	Code
RVC	Medium Voltage	0603	0.100W	1%	E24, E96	0603, 0805, 1206	5,000	Paper Tape	R
		0805	0.125W	5%	E24	2010, 2512	4,000	Embossed Tape	
		1206	0.250W	10%					
		2010	0.500W						
		2512	1.500W						



Mechanical Specifications

Type / Code	L Body Length	W Body Width	H Body Height	a Top Termination	b Bottom Termination	Units
RVC 0603	0.063 ± 0.004 1.60 ± 0.10	0.031 + 0.006/-0.002 0.80 ± 0.15/-0.05	0.018 ± 0.004 0.45 ± 0.10	0.012 ± 0.004 0.30 ± 0.10	0.012 ± 0.004 0.30 ± 0.10	inches mm
RVC 0805	0.079 ± 0.004 2.00 ± 0.10	0.049 ± 0.004 1.25 ± 0.10	0.021 ± 0.004 0.55 ± 0.10	0.016 ± 0.008 0.40 ± 0.20	0.016 ± 0.008 0.40 ± 0.20	inches mm
RVC 1206	0.126 ± 0.006 3.20 ± 0.15	0.063 ± 0.006 1.60 ± 0.15	0.021 ± 0.004 0.55 ± 0.10	0.020 ± 0.010 0.50 ± 0.25	0.020 ± 0.010 0.50 ± 0.25	inches mm
RVC 2010	0.197 ± 0.006 5.00 ± 0.15	0.098 ± 0.006 2.50 ± 0.15	0.021 ± 0.006 0.55 ± 0.15	0.024 ± 0.008 0.60 ± 0.20	0.024 ± 0.008 0.60 ± 0.20	inches mm
RVC 2512	0.248 ± 0.006 6.30 ± 0.15	0.126 ± 0.006 3.20 ± 0.15	0.021 ± 0.006 0.55 ± 0.15	0.024 ± 0.008 0.60 ± 0.20	0.024 ± 0.008 0.60 ± 0.20	inches mm

Performance Characteristics

Test	Test Methods (JIS C 5201-1 : 1998)	Test Results
Voltage Proof	Clause 4.7 500Va.c.,60s : RVC 0805,RVC 1206, RVC 2010, RVC 2512 100Va.c.,60s : RVC 0603	No breakdown or flashover R ≥ 1G ohm
Variation of Resistance with Temperature	Clause 4.8 Measuring temperature: +20°C/ -55°C/ +20°C/ +125°C/ +20°C	See ratings table
Overload	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.	$\Delta R \leq \pm 1\% + 0.05\Omega$ No visible damage, legible markings
Solderability	Clause 4.17 235°C, 2s.	In accordance with Clause 4.17.4.5
Resistance to Soldering Heat	Clause 4.18 After immersion into the flux, the immersion into solder shall be carried out in Solder bath at 260°C for 5s.	$\Delta R \leq \pm 1\% + 0.05\Omega$
Rapid Change of Temperature	Clause 4.19 5 Cycles between -55°C and + 125°C.	$\Delta R \leq \pm 1\% + 0.05\Omega$ No visible damage
Climatic Sequence	Clause 4.23 Dry/Damp heat (12+12h cycle), first cycle./ Cold/Damp heat (12+12h cycle), remaining cycle./ D.C. Load	$\Delta R \leq \pm 5\% + 0.10\Omega$ No visible damage
Damp Test, Steady State	Clause 4.24 40°C, 95% R.H., 56 days, test a) and b) of Clause 4.24.2.1	$\Delta R \leq \pm 5\% + 0.10\Omega$ No visible damage, legible markings
Endurance @ 70°C	Clause 4.25.1 Rated voltage, 1.5h "ON", 05.h "OFF", 70°C, 1,000h	$\Delta R \leq \pm 5\% + 0.10\Omega$ No visible damage
Endurance at the Upper Category Temperature	Clause 4.25.3 125°C, no load, 1,000h	$\Delta R \leq \pm 5\% + 0.10\Omega$ No visible damage
Adhesion	Clause 4.32 5N, 10s	No visible damage
Bend of Strength of the Face Plating	Clause 4.33 Amount of bend: 3mm RVC 0603 RVC 0805 RPC 1206 Amount of bend: 1mm RVC 2010 RVC 2512	$\Delta R \leq \pm 1\% + 0.05\Omega$

Operating Temperature Range : -55°C to +125°C