## RCWP

Vishay Dale



# **Thick Film Chip Resistors, Industrial**



### FEATURES

- Operating temperature range:
  55 °C to + 150 °C
- Same materials and construction as MIL-PRF-55342 chip resistors



- Termination: Tin/Lead wraparound termination over nickel barrier. Also available with lead (Pb)-free wraparound terminations
- Capability to develop specific reliability programs designed to customer requirements
- Size, value, packaging and materials can be customized for special customer requirements
- For zero ohm jumpers, see Vishay Dale's RCWP Jumper data sheet
- Compliant to RoHS directive 2002/95/EC

STANDARD ELECTRICAL SPECIFICATIONS										
GLOBAL MODEL	HISTORICAL MODEL	POWER RATING <i>P</i> <sub>70 °C</sub> W <sup>(1)</sup>	MAXIMUM OPERATING VOLTAGE	TEMPERATURE COEFFICIENT ppm/°C	TOLERANCE %	RESISTANCE RANGE Ω				
RCWP0201	RCWP-0201	0.05	30	300 100, 300	$\pm 5 \text{ to } \pm 10$ $\pm 1 \text{ to } \pm 10$	10 to 46.4 47 to 1M				
RCWP0502	RCWP-0502	0.05	40	300 100, 300	$\pm 2 \text{ to } \pm 10$ $\pm 1 \text{ to } \pm 10$	1 to 9.1 10 to 22M				
RCWP0302	RCWP-0302	0.04	15	300 100, 300	$\pm 2 \text{ to } \pm 10$ $\pm 1 \text{ to } \pm 10$	1 to 9.1 10 to 22M				
RCWP0402	RCWP-0402	0.05	30	300 100, 300	$\pm 2 \text{ to } \pm 10$ $\pm 1 \text{ to } \pm 10$	1 to 9.1 10 to 22M				
RCWP0603	RCWP-0603	0.10	50	300 100, 300	$\pm 2 \text{ to } \pm 10$ $\pm 1 \text{ to } \pm 10$	1 to 5.6 5.62 to 22M				
RCWP0540	RCWP-540	0.08	40	300 100, 300	$\pm 2 \text{ to } \pm 10$ $\pm 1 \text{ to } \pm 10$	1 to 9.1 10 to 22M				
RCWP0550	RCWP-550	0.125	50	300 100, 300	$\pm 2 \text{ to } \pm 10$ $\pm 1 \text{ to } \pm 10$	1 to 9.1 10 to 22M				
RCWP0575	RCWP-575	0.15	70	300 100, 300	$\pm 2 \text{ to } \pm 10$ $\pm 1 \text{ to } \pm 10$	1 to 5.6 5.62 to 22M				
RCWP5100	RCWP-5100	0.20	100	300 100, 300	$\pm 2 \text{ to } \pm 10$ $\pm 1 \text{ to } \pm 10$	1 to 5.6 5.62 to 22M				
RCWP1206	RCWP-1206	0.25	100	300 100, 300	$\pm 2 \text{ to } \pm 10$ $\pm 1 \text{ to } \pm 10$	1 to 5.6 5.62 to 22M				
RCWP5150	RCWP-5150	0.35	125	300 100, 300	$\pm 2 \text{ to } \pm 10$ $\pm 1 \text{ to } \pm 10$	1 to 5.6 5.62 to 22M				
RCWP1100	RCWP-1100	0.50	100	300 100, 300	$\pm 2 \text{ to } \pm 10$ $\pm 1 \text{ to } \pm 10$	1 to 5.6 5.62 to 22M				
RCWP7225	RCWP-7225	0.60	200	300 100, 300	$\pm 2 \text{ to } \pm 10$ $\pm 1 \text{ to } \pm 10$	1 to 5.6 5.62 to 22M				
RCWP2010	RCWP-2010	0.80	200	300 100, 300	$\pm 2 \text{ to } \pm 10$ $\pm 1 \text{ to } \pm 10$	1 to 5.6 5.62 to 22M				
RCWP2512	RCWP-2512	1.0	200	300 100, 300	$\pm 2 \text{ to } \pm 10$ $\pm 1 \text{ to } \pm 10$	1 to 5.6 5.62 to 22M				

#### Notes

<sup>(1)</sup> Power rating depends on the max. temperature at the solder point, the component placement density and the substrate material

· Consult factory for extended resistance range

\* Pb containing terminations are not RoHS compliant, exemptions may apply







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### **DIMENSIONS** in inches [millimeters]



GLOBAL	A	B	C	D	E
MODEL	(Length)	(Width)	(Height)	(Top Term)	(Bottom Term)
RCWP0201	0.024 ± 0.002	$0.012 \pm 0.002$	$0.009 \pm 0.002$	0.006 ± 0.003	0.006 + 0.002 - 0.004
	[0.60 ± 0.05]	[0.30 ± 0.05]	[0.23 ± 0.05]	[0.15 ± 0.07]	[0.15 + 0.05 - 0.10]
RCWP0302	0.034 ± 0.004	0.021 ± 0.003	0.015 ± 0.003	0.007 ± 0.005	0.008 ± 0.005
	[0.86 ± 0.10]	[0.53 ± 0.08]	[0.38 ± 0.08]	[0.18 ± 0.13]	[0.20 ± 0.13]
RCWP0402	$0.039 \pm 0.003$	0.020 ± 0.003	0.013 ± 0.003	0.010 ± 0.005	0.010 ± 0.005
	[0.99 ± 0.08]	[0.51 ± 0.08]	[0.33 ± 0.08]	[0.25 ± 0.13]	[0.25 ± 0.13]
RCWP0502	0.055 ± 0.005	0.023 ± 0.003	$0.015 \pm 0.003$	0.010 ± 0.005	0.015 ± 0.005
	[1.40 ± 0.13]	[0.58 ± 0.08]	[0.38 ± 0.08]	[0.25 ± 0.13]	[0.38 ± 0.13]
RCWP0540	0.055 ± 0.005	0.040 ± 0.005	0.020 ± 0.005	0.010 ± 0.005	0.010 ± 0.005
	[1.40 ± 0.13]	[1.02 ± 0.13]	[0.51 ± 0.13]	[0.25 ± 0.13]	[0.25 ± 0.13]
RCWP0550	0.055 ± 0.005	0.050 ± 0.005	0.020 ± 0.005	0.010 ± 0.005	0.015 ± 0.005
	[1.40 ± 0.13]	[1.27 ± 0.13]	[0.51 ± 0.13]	[0.25 ± 0.13]	[0.38 ± 0.13]
RCWP0575	0.080 ± 0.005	0.050 ± 0.005	0.020 ± 0.005	0.015 ± 0.005	0.015 ± 0.005
	[2.03 ± 0.13]	[1.27 ± 0.13]	[0.51 ± 0.13]	[0.38 ± 0.13]	[0.38 ± 0.13]
RCWP0603	0.063 ± 0.005	0.032 ± 0.005	0.018 ± 0.005	0.012 ± 0.005	0.015 ± 0.005
	[1.60 ± 0.13]	[0.81 ± 0.13]	[0.46 ± 0.13]	[0.31 ± 0.13]	[0.38 ± 0.13]
RCWP1100	0.105 ± 0.005	0.100 ± 0.005	0.020 ± 0.005	0.015 ± 0.005	0.015 ± 0.005
	[2.67 ± 0.13]	[2.54 ± 0.13]	[0.51 ± 0.13]	[0.38 ± 0.13]	[0.38 ± 0.13]
RCWP1206	0.125 ± 0.005	0.063 ± 0.005	0.020 ± 0.005	0.015 ± 0.005	0.015 ± 0.005
	[3.18 ± 0.13]	[1.60 ± 0.13]	[0.51 ± 0.13]	[0.38 ± 0.13]	[0.38 ± 0.13]
RCWP2010	0.197 ± 0.006	0.098 ± 0.005	0.020 ± 0.005	0.020 ± 0.005	0.020 ± 0.005
	[5.00 ± 0.15]	[2.49 ± 0.13]	[0.51 ± 0.13]	[0.51 ± 0.13]	[0.51 ± 0.13]
RCWP2512	0.250 ± 0.006	0.124 ± 0.005	0.020 ± 0.005	0.020 ± 0.005	0.020 ± 0.005
	[6.35 ± 0.15]	[3.15 ± 0.13]	[0.51 ± 0.13]	[0.51 ± 0.13]	[0.51 ± 0.13]
RCWP5100	0.105 ± 0.005	0.050 ± 0.005	0.020 ± 0.005	0.015 ± 0.005	0.015 ± 0.005
	[2.67 ± 0.13]	[1.27 ± 0.13]	[0.51 ± 0.13]	[0.38 ± 0.13]	[0.38 ± 0.13]
RCWP5150	0.155 ± 0.005	0.050 ± 0.005	0.020 ± 0.005	0.015 ± 0.005	0.015 ± 0.005
	[3.94 ± 0.13]	[1.27 ± 0.13]	[0.51 ± 0.13]	[0.38 ± 0.13]	[0.38 ± 0.13]
RCWP7225	0.230 ± 0.005	0.075 ± 0.005	0.020 ± 0.005	0.020 ± 0.005	0.020 ± 0.005
	[5.84 ± 0.13]	[1.91 ± 0.13]	[0.51 ± 0.13]	[0.51 ± 0.13]	[0.51 ± 0.13]



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