Vishay Techno

Thick Film Chip Resistors



STANDARD ELECTRICAL SPECIFICATIONS

MODEL	RESISTANCE RANGE (Ohms)	POWER RATING* (mW)
CR1	100 - 500K	100
CR5050	100 - 500K	100
CR2	100 - 1M	200
CR3	100 - 1M	250
CR1010	100 - 1M	450
CR1206	100 - 1M	300
CR4	100 - 1M	325
CR5	100 - 1M	525
CR2010	100 - 1M	575

*Higher values available. Please consult our application engineer at 909-923-3313.

FEATURES

- · Flow solderable.
- · Custom sizes available.
- · Burn-in data available.
- · Automatic placement capability.
- Top and wraparound terminations.
- Tape and reel packaging available.
- · Internationally standardized sizes.

ELECTRICAL SPECIFICATIONS

Resistance Range: 100 ohms to 1 Megohm (Higher values available).

Resistance Tolerance: $\pm 1\%$, $\pm 2\%$, $\pm 5\%$, $\pm 10\%$, $\pm 20\%$. Temperature Coefficient: (- 55°C to + 150°C)

± 100ppm/°C: Standard thru 1 Megohm.

± 200ppm/°C: 1.1 Megohms thru 10 Megohms.

Power Rating: 100mW thru 575mW.

Short Time Overload: Less than $0.5\% \Delta R$.

MECHANICAL SPECIFICATIONS

Construction: 96% alumina substrate with proprietary cermet resistance element and specified termination material.

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature: - 55°C to + 150°C. Moisture Resistance: Less than .5% change when tested per Method 106 of MIL-STD-202.

Life: Less than 1% change when tested per Method 108D (+ 85°C) of MIL-STD-202.

Termination Style A (3 sided wraparound)	Termination Style B (Top conductor only)	MODEL	LENGTH (L)* ± 0.006 [0.152]	WIDTH (W)* ±0.006 [0.152]	THICKNESS (T)* ± 0.002 [0.051]
× w	*All dimensions are before solder coating.	CR1	0.050 [1.27]	0.040 [1.02]	0.012 [0.305]
		CR5050	0.050 [1.27]	0.050 [1.27]	0.010 [0.254]
.025 [.635]		CR2	0.075 [1.90]	0.050 [1.27]	0.015 [0.381]
Max.		CR3	0.100 [2.54]	0.050 [1.27]	0.015 [0.381]
Termination Style C (5 sided wraparound)		CR1010	0.100 [2.54]	0.100 [2.54]	0.020 [0.508]
,		CR1206	0.125 [3.18]	0.062 [1.57]	0.025 [0.635]
L		CR4	0.150 [3.81]	0.050 [1.27]	0.015 [0.381]
T T		CR5	0.225 [5.72]	0.075 [1.90]	0.015 [0.381]
.025 [.635] Max.		CR2010	0.200 [5.08]	0.100 [2.54]	0.020 [0.508]

ORDERING INFORMATION									
CR MODEL	5050 SIZE	A TERMINATION STYLE	A TERMINATION MATERIAL	1001 VALUE	F TOLERANCE	100 TCR	S2 SOLDER TERMINATION		
CR = Sta	Indard	A = 3 sided B = Top only C = 5 sided	$\begin{array}{l} A = Palladium \\ Silver \\ B = Platinum \ Gold \\ C = Gold \\ D = Platinum \ Silver \\ E = Palladium \ Gold \end{array}$	The first 3 digits are significant figures. Last digit specifies the number of zeros to follow. Example : 1001 = 1 kilohm.	$\begin{array}{l} F = \pm 1\% \\ G = \pm 2\% \\ J = \pm 5\% \\ K = \pm 10\% \\ M = \pm 20\% \end{array}$	$\begin{array}{l} 100 = \pm \ 100 \text{ppm/}^{\circ}\text{C} \\ 150 = \pm \ 150 \text{ppm/}^{\circ}\text{C} \\ 200 = \pm \ 200 \text{ppm/}^{\circ}\text{C} \\ 350 = \pm \ 350 \text{ppm/}^{\circ}\text{C} \end{array}$			

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Document Number 68013 Revision 12-Feb-03

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