



RESISTOR DIVIDER

CDHV



High-Voltage Chip Resistor Divider

KEY BENEFITS

- High-voltage capability to 3000 Volts
- Small physical size (2512 case size)
- Outstanding ratio stability: < 0.3% at 70 °C at 2000 hours, full power
- Standard and custom ratio values covering multiple ratio dividers: 10:1 to 500:1

APPLICATIONS

- High-voltage power supplies
- Inverters
- Regulators
- High-voltage control circuits

High-Voltage Chip Divider

FEATURES

- High voltage up to 3000 volts
- Outstanding Stability
- Typical resistance ratios of 250:1, 500:1, etc
- Flow solderable
- Tape & Reel packaging available
- Top and Wraparound termination
- Nickel Barrier available



ELECTRICAL SPECIFICATIONS

Resistance range: 1 M Ω to 20 G Ω
 Resistance tolerance: $\pm 1\%$ to $\pm 20\%$
 Power rating: See table
 Voltage coefficient: See table
 Temperature coefficient: See table
 Ratio tracking: See table

MECHANICAL SPECIFICATIONS

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

ENVIRONMENTAL SPECIFICATIONS

Operating temperature: - 55 °C to + 150 °C
 Life: Less than 0.5 % change when tested at full rated power
 (Reference only. Not for all values specified. Consult factory for value.)

STANDARD ELECTRICAL SPECIFICATIONS

RESISTANCE (OHMS)	POWER RATING (MW)	VOLTAGE RATING (V MAX)
20 M - 20 G	Contact Factory	3000

VOLTAGE & TEMPERATURE COEFFICIENTS OF RESISTANCE CHART TYPICAL

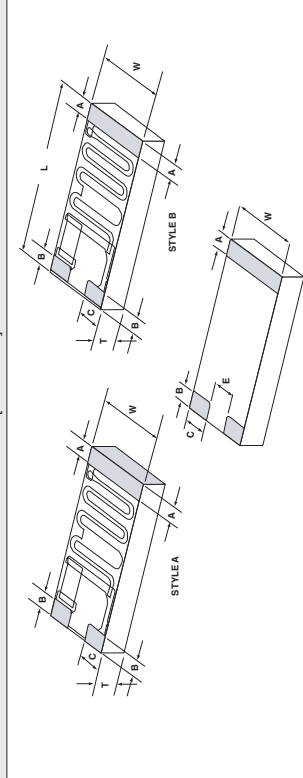
RESISTANCE (OHMS)	RATIO (TYPICAL)	VCR (PPM/V)	TCR (PPM/°C) - 55 °C to + 150 °C
20 M	250:1	5	260
150 M	300:1	5	80
800 M	300:1	10	50
20 G	700:1	90	160

RATIO TRACKING (PPM/°C)

RESISTANCE (OHMS)	RATIO (TYPICAL)	COLD (+ 25 °C to - 50 °C)	HOT (+ 25 °C to + 150 °C)
20 M	250:1	5	260
150 M	300:1	5	80
800 M	300:1	10	50
20 G	700:1	90	160

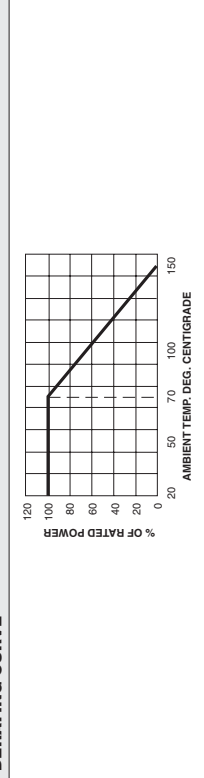
*** Contact Factory for other Ratios

DIMENSIONAL CONFIGURATIONS in inches [millimeters]



TERMINATION	LENGTH (L) ± 0.006 [0.152]	WIDTH (W) ± 0.006 [0.152]	THICKNESS (T) ± 0.002 [0.051]	A ± 0.005	B ± 0.005	C ± 0.005	E ± 0.005
STYLE A (Wraparound 3 Sided)	0.250	0.126	0.025	0.025	0.025	0.040	0.046
STYLE B (Top only)	0.240	0.126	0.025	0.025	0.025	0.040	-

DERATING CURVE



(Reference only. Not for all values specified. Consult factory for your size and value.)

ORDERING INFORMATION

MODEL	TERMINATION STYLE	TERMINATION MATERIAL	VALUE RT	2005	J	ABSOLUTE TOLERANCE	2500	G	RATIO TOLERANCE	2500	TERMINATION MATERIAL	e1
CDHV2512	A	A = Wraparound B = Top only	A = Palladium Silver B = Platinum Gold C = Gold D = Platinum Silver E = Palladium Gold F = Nickel Barrier			F = 1 % G = 2 % H = 3 % J = 5 % K = 10 % M = 20 %			F = 1 % G = 2 % H = 3 % J = 5 %		S2 = Sn62 e1 = Sn95/5	

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