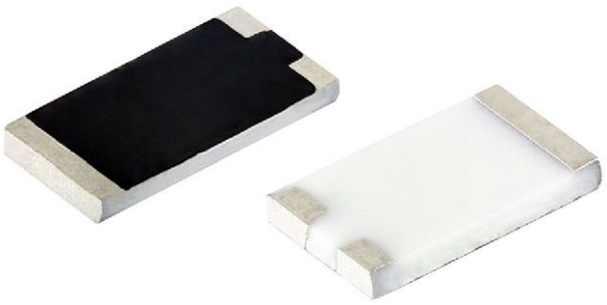
Thick Film Chip Dividers, Medium Voltage



FEATURES

- AEC-Q200 qualified
- Voltage up to 1415 V
- Precision to ± 0.5 % with low TCR tracking to 10 ppm/°C utilizing thick film technology
- Wide range of resistance value and ratios
- Flow solderable
- Tape and reel packaging available
- Termination style: 3-sided wraparound termination
- Termination material: solder-coated nickel barrier
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free Available
RoHS COMPLIANT
HALOGEN FREE

LINKS TO ADDITIONAL RESOURCES

3D Models Footprints

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	CASE SIZE	POWER RATING $P_{70\,°C}$ W	MAXIMUM WORKING VOLTAGE (1) V	RESISTANCE RANGE (2) Ω	TOLERANCE (3) ± %	TCR TRACKING (-55 °C to +155 °C) ± ppm/°C
CDMA 2512	2512	1	1415	500K to 50M	0.5, 1, 2, 5, 10	10 to 50

Notes
(1) Continuous working voltage shall be $\sqrt{P \times R}$ or maximum working voltage, whichever is less
(2) Resistance values are calibrated at 100 V_{DC}. Calibration at other voltages available upon request
(3) Contact factory for tighter tolerances

VOLTAGE COEFFICIENTS AND RATIO TRACKING INFORMATION (Typical)

RESISTANCE (Ω)	RATIO (MAXIMUM)	VCR (ppm/V)	RATIO TRACKING (ppm/°C) -55 °C to +155 °C
500K	100:1	-10	± 20
15M	250:1	-10	± 10
50M	500:1	-10	-50 to 0

Note
- Contact factory for other ratios

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: CDMA20K0J1000GEB (preferred part number format)

C	D	M	A	2	0	K	0	J	1	0	0	0	G	E	B		

GLOBAL MODEL	RESISTANCE VALUE (R_1)	TOLERANCE	RATIO ($R_1 + R_2$) / R_2	RATIO TOLERANCE	SOLDER TERMINATION	PACKAGING	SPECIAL
CDMA = CDMA2512	K = kΩ M = MΩ **20K0** = 20 kΩ **800K** = 800 kΩ **1M00** = 1 MΩ	**D** = ± 0.5 % **F** = ± 1 % **G** = ± 2 % **J** = ± 5 % **K** = ± 10 %	3 digit significant figure, followed by a multiplier **1000** = 100:1 **2000** = 200:1	**D** = ± 0.5 % **F** = ± 1 % **G** = ± 2 % **H** = ± 3 % **J** = ± 5 %	**E** = Sn100	**B** = bulk (250 pcs max.) **F** = T / R (full reel) **1** = T / R (1000 pcs) **5** = T / R (500 pcs) **T** = T / R (250 pcs min.) **W** = waffle tray	

Note
- For additional information on packaging, refer to the “Surface-Mount Resistor Packaging” document (www.vishay.com/doc?31543)

For technical questions, contact: te1resistors@vishay.com

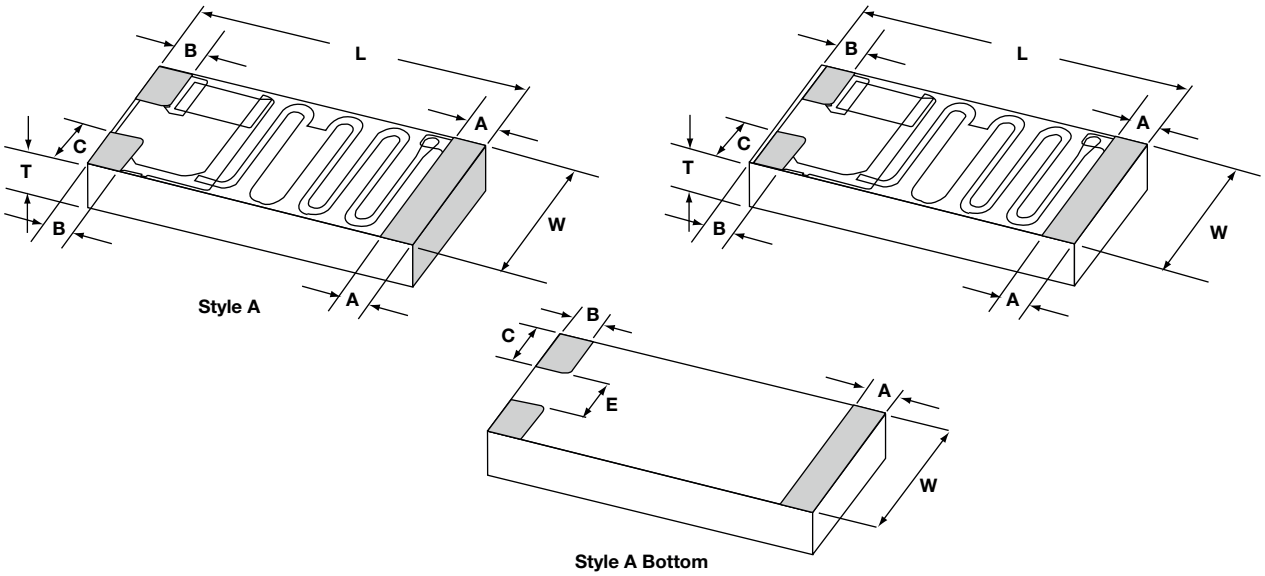
MATERIAL SPECIFICATIONS	
Resistive element	Ruthenium oxide
Encapsulation	Epoxy
Substrate	96 % alumina
Termination	Solder-coated nickel barrier terminations standard
Solder finish	Pure tin or tin

ENVIRONMENTAL SPECIFICATIONS	
Operating temperature	-55 °C to +155 °C
Life	Less than 0.5 % change when tested at full rated power

Note

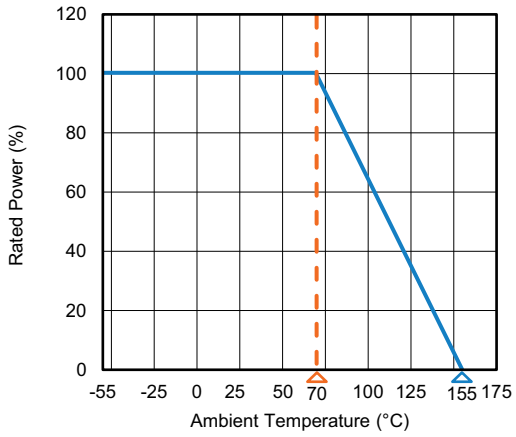
- Reference only: not for all values specified. Consult factory for your size and value

DIMENSIONS in inches (millimeters)



TERMINATION	LENGTH (L) ± 0.006 (0.152)	WIDTH (W) ± 0.006 (0.152)	THICKNESS (T) ± 0.005 (0.127)	A ± 0.005	B ± 0.005	C ± 0.005	E ± 0.010
Style A (3-sided wraparound)	0.250	0.126	0.025	0.025	0.025	0.040	0.046

DERATING CURVE



Note

- Reference only: not for all values specified. Consult factory for your specific value

TYPE	TERMINATION MATERIAL	TERMINATION STYLE	TERMINATION STYLE / MATERIAL CODE	SOLDER TERMINATION CODE
Solderable	Nickel barrier	3-sided (wraparound)	AF	E or T

SCHEMATIC