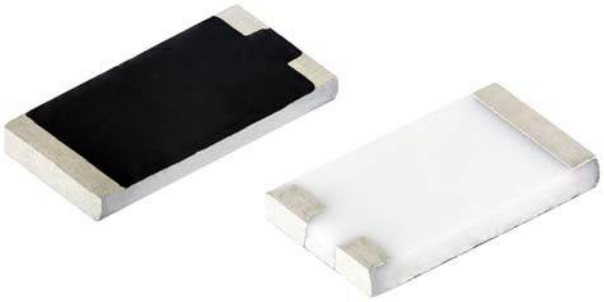
Thick Film Chip Dividers, Medium Voltage



FEATURES

- Voltage up to 1415 V
- Maximum resistance ratio of 700:1
- Flow solderable
- Tape and reel packaging available
- Termination style: 3-sided wraparound termination or single termination flip chip available
- Suitable for solderable, epoxy bondable, or wire bondable applications
- Termination material: solder-coated nickel barrier terminations standard; gold, palladium silver, platinum gold, platinum silver, or platinum palladium gold terminations available
- Multiple styles, termination materials, and configurations, allow wide design flexibility
- Epoxy bondable or wire bondable non-magnetic terminations available
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Pb-free Available

RoHS* Available

HALOGEN FREE

Note

* This datasheet provides information about parts that are RoHS-compliant and / or parts that are non-RoHS-compliant. For example, parts with lead (Pb) terminations are not RoHS-compliant. Please see the information / tables in this datasheet for details.

STANDARD ELECTRICAL SPECIFICATIONS

GLOBAL MODEL	CASE SIZE	POWER RATING $P_{70\,°C}$ W	MAXIMUM WORKING VOLTAGE (1) V	RESISTANCE RANGE (2) Ω	TOLERANCE (3) ± %	TEMPERATURE COEFFICIENT (4) (-55 °C to +155 °C) ± ppm/°C	TCR TRACKING ± ppm/°C
CDMV 2512	2512	Contact factory	1415	10K to 75M	0.5, 1, 2, 5, 10	100	50 (typical)

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.
(4) Reference only: not for all values specified; consult factory for your value.

VOLTAGE AND TEMPERATURE COEFFICIENTS OF RESISTANCE CHART TYPICAL

RESISTANCE (Ω)	RATIO (MAXIMUM)	VCR (ppm/V)	TCR (ppm/°C) -55 °C to +155 °C
10K to 100K	200:1	10	150
> 100K to 1M	400:1	10	100
> 1M	700:1	10	100

Note

- Contact factory for other ratios.

GLOBAL PART NUMBER INFORMATION

New Global Part Numbering: CDMVAF20K0J1000GEB (preferred part number format)

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

GLOBAL MODEL	TERM STYLE	TERM MATERIAL	RESISTANCE VALUE (R1)	TOLERANCE	RATIO R1/R2	RATIO TOLERANCE	SOLDER TERMINATION	PACKAGING
CDMV = CDMV2512	**A** = 3-sided **B** = top only	**F** = nickel barrier **A** = palladium silver **B** = platinum gold **C** = gold **D** = platinum silver **E** = platinum palladium gold	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 **0500** = 50:1 **1000** = 100:1 **2000** = 200:1	**D** = ± 0.5 % **F** = ± 1 % **G** = ± 2 % **H** = ± 3 % **J** = ± 5 %	**E** = Sn100 **N** = no solder **T** = Sn90 / Pb10	**B** = bulk **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

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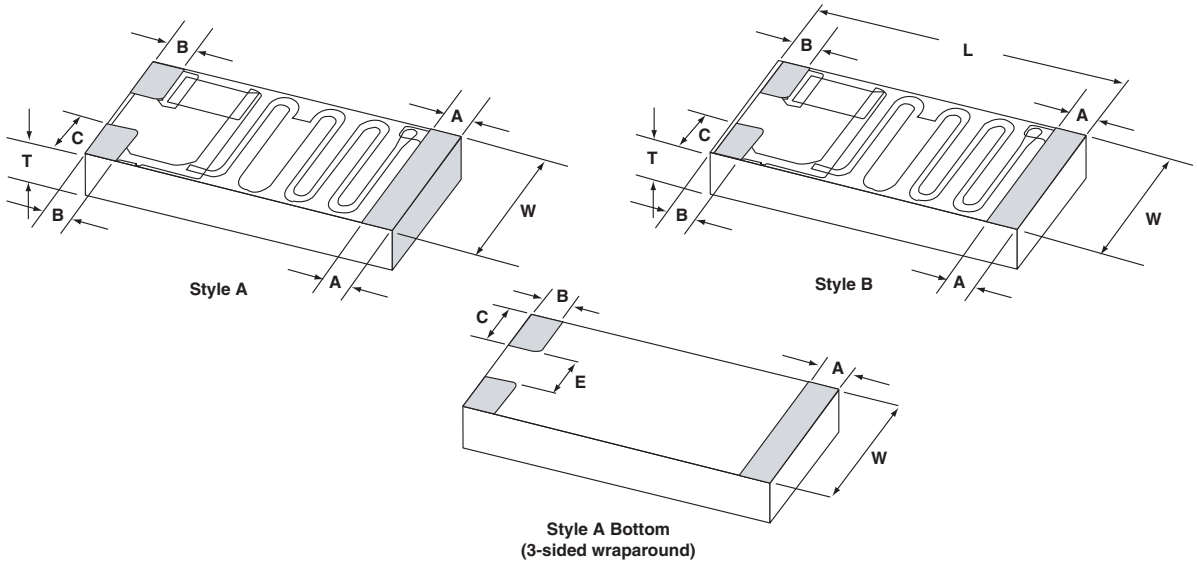
MECHANICAL SPECIFICATIONS	
Resistive element	Ruthenium oxide
Encapsulation	Epoxy
Substrate	96 % alumina
Termination	Solder-coated nickel barrier terminations standard. Gold, palladium silver, platinum gold, platinum silver, platinum palladium gold terminations available.
Solder finish	Pure tin or tin / lead solder alloys standard.

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)

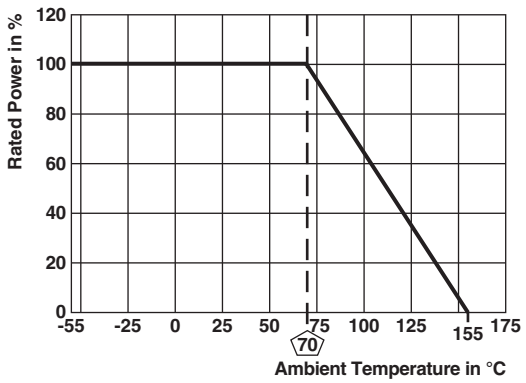


TERMINATION	LENGTH (L) ± 0.006 (0.152)	WIDTH (W) ± 0.006 (0.152)	THICKNESS (T) ± 0.005 (0.127)	A ± 0.005	B ± 0.005	C ± 0.005	E ± 0.005
STYLE A (3-sided wraparound)	0.250	0.126	0.025	0.025	0.025	0.040	0.046
STYLE B (top only)	0.240	0.126	0.025	0.025	0.025	0.040	-

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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
		Top only (flip chip)	BF	
Epoxy bondable / solderable	Platinum palladium gold	Top only (flip chip)	BE	N
Wire bondable / epoxy bondable	Gold	Top only (flip chip)	BC	N
Epoxy bondable	Palladium silver	Top only (flip chip)	BA	N
	Platinum gold		BB	
	Platinum silver		BD	

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