

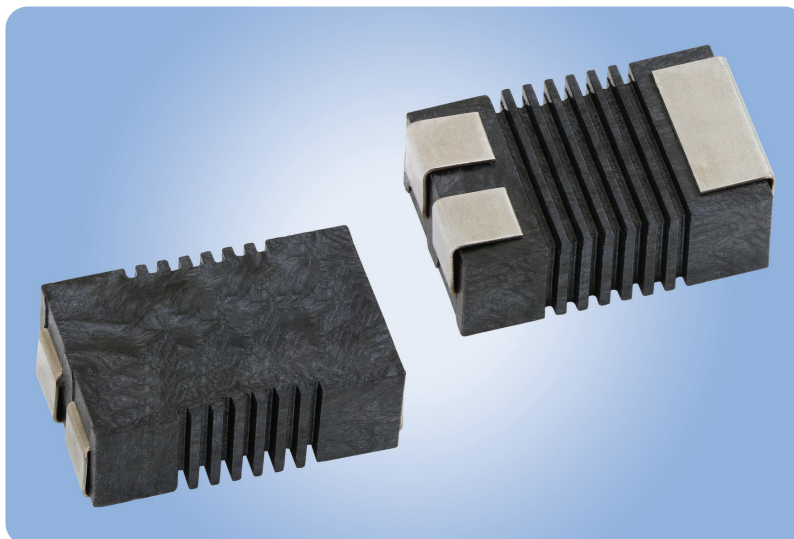


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# HIGH VOLTAGE MOLDED CHIP DIVIDER

CDMM

## Molded Divider, High Voltage (Up to 1500 V), Surface-Mount



### KEY BENEFITS

- AEC-Q200 qualified
- Up to 1500 V input voltage
- Compliant terminations
- High creepage distance
- Sulfur-resistant
- Good TCR tracking and ratio tolerances compared to individual components
- Wide resistance range and ratios

### APPLICATIONS

- Automotive: hybrid vehicles (HV) and electric vehicles
- Industrial: voltage dividers, voltage management, DC/DC converters

### RESOURCES

- Datasheet: CDMM - [www.vishay.com/ppg?68041](http://www.vishay.com/ppg?68041)
- For technical questions contact [te1resistors@vishay.com](mailto:te1resistors@vishay.com)
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



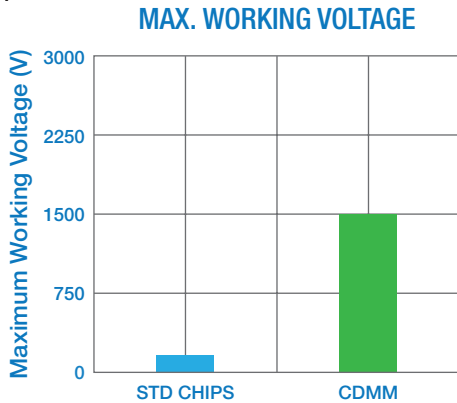
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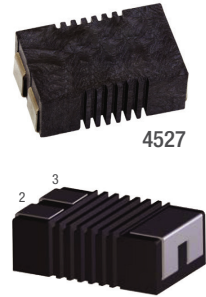
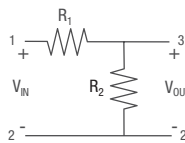
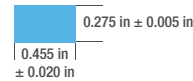
## Molded Divider, High Voltage (Up to 1500 V), Surface-Mount

Vishay Dale released a high voltage, SMT molded chip divider for automotive and industrial applications. The main features are listed below:



**FOOTPRINT**

Shown at actual size



STANDARD ELECTRICAL SPECIFICATIONS									
GLOBAL MODEL	CASE SIZE	POWER RATING $P_{70^\circ\text{C}}$ W	MAXIMUM WORKING VOLTAGE <sup>(1)</sup> V	RESISTANCE RANGE $R_1$	TOLERANCE <sup>(3)</sup> $R_1$ ± %	RATIO RANGE $(R_1 + R_2) / R_2$	RATIO TOL. ± %	TEMPERATURE COEFFICIENT <sup>(4)</sup> (-55 °C to +125 °C) ± ppm/°C	TCR TRACKING ± ppm/°C
CDMM	4527	1.5	1500	500K to 50M <sup>(2)</sup>	0.5, 1, 2, 5, 10	100:1 to 500:1	0.5, 1, 2, 5	100	10 - 50

**Notes**

- <sup>(1)</sup> Continuous working voltage shall be  $\sqrt{P \times R}$  or maximum working voltage, whichever is less
- <sup>(2)</sup> Resistance value is calibrated at 100 V<sub>DC</sub>
- <sup>(3)</sup> Contact factory for tighter tolerances
- <sup>(4)</sup> Reference only: Not for all values specified. Consult factory for your value

GLOBAL PART NUMBER INFORMATION																	
New Global Part Numbering: CDMM20M0F2500FEF (preferred part number format)																	
C	D	M	M	2	0	M	0	F	2	5	0	0	F	E	F		
<b>GLOBAL MODEL</b> (see Standard Electrical Specifications Global Model column for options)	<b>RESISTANCE VALUE (<math>R_1</math>)</b> K = kΩ M = MΩ 525K = 525 kΩ 1M50 = 1.5 MΩ		<b>TOLERANCE</b> D = ± 0.5 % F = ± 1 % G = ± 2 % J = ± 5 % K = ± 10 %		<b>RATIO (<math>(R_1 + R_2) / R_2</math>)</b> 3 digit significant figure, followed by a multiplier 2500 = 250:1 3000 = 300:1		<b>RATIO TOLERANCE</b> D = ± 0.5 % F = ± 1 % G = ± 2 % J = ± 5 %		<b>SOLDER TERMINATION</b> E = Sn100		<b>PACKAGING</b> B = bulk (250 pcs max.) F = T/R (1200 pcs) 1 = T/R (1000 pcs) 5 = T/R (500 pcs) T = T/R (250 pcs min.)		<b>SPECIAL</b> Blank = standard (dash number) (up to 2 digits) from 1 to 99 as applicable				

**Notes**

- Contact factory for other ratios

VOLTAGE AND TEMPERATURE COEFFICIENTS OF RESISTANCE CHART (TYPICAL)				
GLOBAL MODEL	RESISTANCE Ω	RATIO (TYPICAL)	VCR ppm/V	RATIO TRACKING (-55 °C to +150 °C) ppm/°C
CDMM	500K	100:1	-10	± 20
	15M	250:1	-10	± 10
	50M	500:1	-10	-50 to 0

**Note**

- Contact factory for other ratios