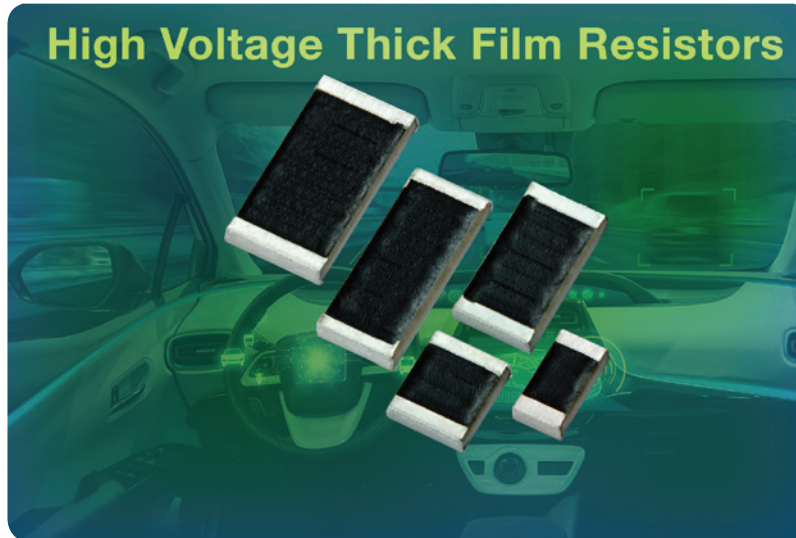




THICK FILM CHIP RESISTORS

CRMA

CRMA Thick Film Chip Resistors, Medium Voltage



KEY BENEFITS

- High voltage handling capability (to 1415 V) compared to standard thick film chips resistors
- Enables designers to reduce component count, circuit board size, and placement costs
- AEC-Q200 qualified for rigorous automotive applications

APPLICATIONS

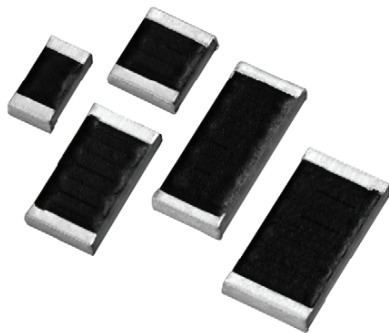
- Battery management
- Voltage monitoring
- High voltage regulators
- Smart circuit breakers
- Electric vehicle charging
- Power inverters
- High voltage power supplies
- Overvoltage protection

RESOURCES

- Datasheet: CRMA - www.vishay.com/doc?68043
- For technical questions contact te1resistors@vishay.com
- For definitions please see www.vishay.com/doc?99912



CRMA Thick Film Chip Resistors, Medium Voltage



FEATURES

- AEC-Q200 qualified
- Voltages up to 1415 V
- Automatic placement capability
- Termination style: 3-sided wraparound termination or single termination flip chip available
- Tape and reel packaging available
- Internationally standardized sizes, custom sizes available
- Termination material: solder-coated nickel barrier or solder coated non-magnetic terminations standard
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912



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 $P_{70\text{ }^{\circ}\text{C}}$ W	MAX. WORKING VOLTAGE ⁽²⁾ V	RESISTANCE RANGE ⁽¹⁾ Ω	TOLERANCE \pm %	TEMPERATURE COEFFICIENT ⁽³⁾ \pm ppm/ $^{\circ}\text{C}$
CRMA1206	1206	0.30	550	150 to 15M	0.5, 1, 2, 5, 10	100
CRMA1210	1210	0.35	650	300 to 20M	0.5, 1, 2, 5, 10	100
CRMA2010	2010	0.50	895	500 to 40M	0.5, 1, 2, 5, 10	100
CRMA2510	2510	0.80	1265	1K to 60M	0.5, 1, 2, 5, 10	100
CRMA2512	2512	1.0	1415	1K to 75M	0.5, 1, 2, 5, 10	100

Notes

- For non-standard sizes, lower values or higher power rating requirement, contact factory
- ⁽¹⁾ Resistance values calibrated at 10 V_{DC}. Calibration at other voltages available upon request
- ⁽²⁾ Continuous working voltage shall be $\sqrt{P \times R}$ or Maximum Working Voltage, whichever is less
- ⁽³⁾ Reference only: Not for all values specified. Consult factory for your size and value

TECHNICAL SPECIFICATIONS						
PARAMETER	UNIT	CRMA1206	CRMA1210	CRMA2010	CRMA2510	CRMA2512
Rated dissipation at 70 °C	W	0.30	0.35	0.50	0.80	1.0
Limiting element voltage	V _≡	550	650	895	1265	1415
Insulation resistance	Ω	$\geq 10^{11}$	$\geq 10^{11}$	$\geq 10^{11}$	$\geq 10^{11}$	$\geq 10^{11}$
Category temperature range	$^{\circ}\text{C}$	-55 to +155	-55 to +155	-55 to +155	-55 to +155	-55 to +155
Weight/1000 (typical)	g	12.2	19.6	32.2	39.8	49.7
VCR (typical)	ppm/V	< 2	< 2	< 2	< 2	< 2

Revision 13-Jun-17