

# Surge Metal Ceramic Resistors

**(RMCC) The Way Allows Energy  
and Power to be Uniformly Distributed**

## ▶ Preview

Following market demands, Token Electronics provided an extent of Bulk Ceramic Composition RMCA, RMCB Series to RMCC Series. The cap and lead assemblies are pressed onto the RMCC resistor core, finishing the resistor and providing rugged terminal attachment.

Token Surge Resistors - RMCC Series are primarily designed for high voltage, power charging/discharging circuits, surge energy applications and conform to the RoHS directive and Lead-free. For customized designs, tighter tolerances, non-standard technical requirements, or custom special applications, please contact our sales for more information.

### **Bulk Ceramic Construction :**

- Bulk metal ceramic resistors that consists of a clay, alumina, and ceramic filler that has been blended and pressurized into a resistive core and then covered with a molded outer insulating core.

### **Replacement Carbon-Composition Resistors :**

- Design requirements for custom sizes, surface mount, or special footprints can be met easily.
- In cases where several carbon-composition resistors have been used together in an array to achieve a particular rating, they have been replaced with a single bulk ceramic resistor, frequently at a lower installed cost.

## ▶ Applications

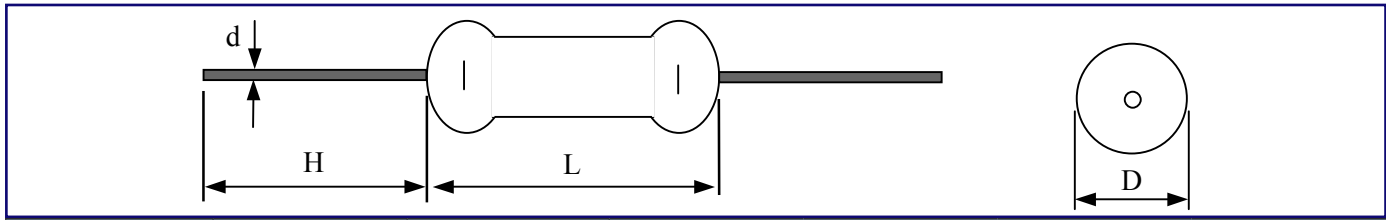
- Radar, Motor Drives, Broadcast Transmitters,
- X-Ray, Lasers, Medical Defibrillators,
- Dynamic Braking, Soft-start/Current-limit,
- Snubber Circuits, Dummy Loads, Energy Research
- RF Amplifiers, Semiconductor Process, Power Conditioning

## ▶ Features

- Operating Temperature  $-40^{\circ}\text{C} \sim 155^{\circ}\text{C}$ .
- Resistance Tolerance K( $\pm 10\%$ ), M( $\pm 20\%$ ).
- Typical resistance range 470 ohm  $\sim$  100 Kohm.
- Replaces 1 and 2 watt carbon composition resistors.
- Suitable for noise suppressor of engine ignition system.
- High peak power, Reliable with non-disconnection failure.
- Rated Wattage up 5W, meets high energy density demands.



## General Specifications (Unit: mm)



Model	Style	Rated Wattage	Dimensions (mm)			
			L	D	H	d
RMC	C	1	11±1.5	4.8±0.5	25±2	0.8±0.05
RMC	C	2	19±1.5	4.8±0.5	25±2	0.8±0.05
RMC	C	3	25±2.0	4.8±0.5	25±2	0.8±0.05
RMC	C	5	25±2.0	7.8±0.5	30±3	1.0±0.05

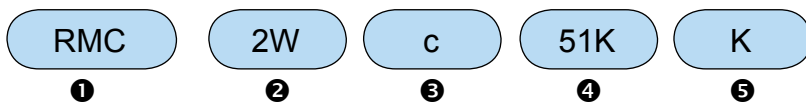
## Electrical Characteristics

Item	RMCC			
Power Rating at 25°C (W)	1	2	3	5
Operating Temp. Range (°C)	-40 ~ 155			
Resistance Tolerance	K(±10%), M(±20%)			
Resistance Range (Ω)	470 ~ 33K	1K ~ 56K	1K ~ 100K	470 ~ 33K
Max. Working Voltage (V)	300	350	400	500
T.C.R (PPM/°C)	-40°C ~ 25°C	-750 ~ 3300	-750 ~ 3300	-750 ~ 3300
	25°C ~ 155°C	-750 ~ 2600	-750 ~ 2600	-750 ~ 2600
Max. Pulse Voltage (KV)	8	15	20	25
Moisture Resistance (%)	10	10	10	10

Non-Inductive Performance:

1. Chemically inert and thermally stable, the resistors are inherently non-inductive because of their bulk ceramic construction, which allows energy and power to be uniformly distributed through the entire ceramic resistor body with no film or wire to fail.
2. The bulk ceramic material also allows simple efficient resistor designs that enable the designer to minimize the resistor package size while providing the required performance and reliability.

## How to Order



① Part Number: RMC

② Rated Power (W): 1W, 2W, 3W, 5W

③ Style: c Style

④ Resistance Value (Ω)

Code	Resistance Value (Ω)
510R	510Ω
5K1	5.1KΩ
51K	51KΩ
68K	68KΩ

⑤ Resistance Tolerance

Code	Resistance Tolerance
K	±10%
M	±20%

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