

## MCB 120 Non inductive Power Resistance

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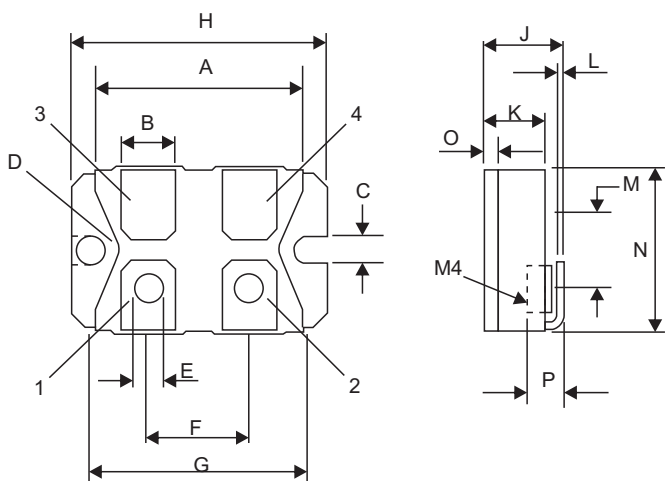
## Feature

- I Imported thick film materials and technology, widely used in high frequency pulse load. Small temperature coefficient, high precision, wide range of resistance, small volume, high power, MCB also can replace the large volume wire wound resistor to be used. The resistor comply with RoHs.
- II Using compact type and easy to be install. MCB can save circuit board space, so as to reduce the size of the final product. The M4 screw flange plate installed 2 ~ 4 terminal, provides 5 kinds of internal structure form, can be adjusted according to customer's requirement.
- III When the bottom center temperature is  $\leq 85^{\circ}C$ , the rated power of a single resistance structure is 120 W.

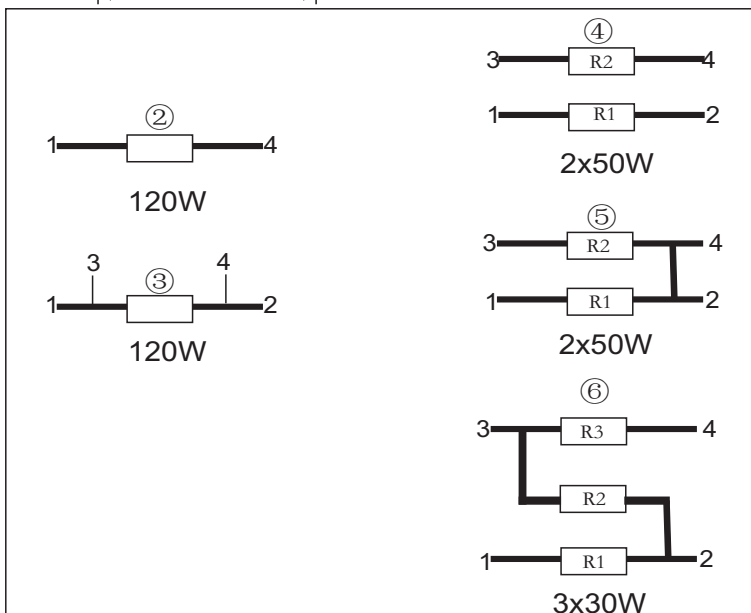
## Application

Medium-power resistor with general type. Mainly used in variable speed drive actuator, power supply, control equipment, communications, automatic control and motor control, etc.

## Dimensions



	Min(mm)	Max(mm)
A	31.00	31.70
B	7.80	8.20
C	4.10	4.30
D	4.00	/
E	4.10	4.30
F	14.90	15.10
G	30.10	30.30
H	38.00	38.20
J	11.80	12.20
K	8.90	9.10
L	0.75	0.85
M	12.60	12.80
N	24.40	25.40
O	1.95	2.05
P	5.30	/



## Reference Standards

JISC 5201-1

## Ordering Information

Example:

MCB120	120	F	100R0
(1)	(3)	(4)	(5)
Series Name	Power Rating	Resistance Tolerance	Resistance

(1)Type: MCB 120 Series

(2)Power Rating: 120=120W

(3)Tolerance: F=  $\pm 1\%$ , G=  $\pm 2\%$ , J=  $\pm 5\%$ , K=  $\pm 10\%$

(4)Resistance Value: 0R100=0.1 $\Omega$ , 0R200=0.20 $\Omega$ , 10R00=10 $\Omega$ , 10K00=10K $\Omega$

## Applications And Ratings

Type	Power (W)	Resistance Range( $\Omega$ )	Tolerance	Maximum working voltage	TCR	Temperature range
MCB120	120W	0.1 $\Omega$ ~ 1M $\Omega$	$\pm 1\%$ ~ $\pm 10\%$	1500V DC	$\pm 50\text{ppm}/^\circ\text{C}$ $\pm 100\text{ppm}/^\circ\text{C}$ $\pm 250\text{ppm}/^\circ\text{C}$	-55 $^\circ\text{C}$ ~ +155 $^\circ\text{C}$

## Performance

Test Items	Performance	Test Methods JIS C 5201-1
Temperature Coefficient	/	$\pm 50\text{ppm}$ , $\pm 100\text{ppm}$ , $\pm 250\text{ppm}$ , (+25 $^\circ\text{C}$ ~ +105 $^\circ\text{C}$ )
Maximum Working Voltage	/	$\leq 1500\text{V DC}$
Partial Discharge	/	According to clients' requirement
Withstand Voltage	/	4000 VDC
Distributed Capacitance	/	45 pF
Lifetime	$\Delta R \leq \pm (1.0\% + 0.001\Omega)$	Rated power 1,000h, baseplate temperature 85 $^\circ\text{C}$
Moisture-proof	$\Delta R \leq \pm (0.25\% + 0.001\Omega)$	56 day/40 $^\circ\text{C}$ , RH $\geq 95\%$
Thermal Shock	$\Delta R \leq \pm (0.3\% + 0.001\Omega)$	MIL-Std-202, method 107, condition F
High-frequency Vibration	$\Delta R \leq \pm (0.2\% + 0.001\Omega)$	MIL - Std - 202, method 204, condition D
Leading-out Terminal Assembly	/	M4screw, maximum torque 1.3Nm
Operating Temperature Range	/	-55 $^\circ\text{C}$ ~ +155 $^\circ\text{C}$