MCB 100 Power Resistor

Catalogue

MCB 100 Power Resistor

Feature

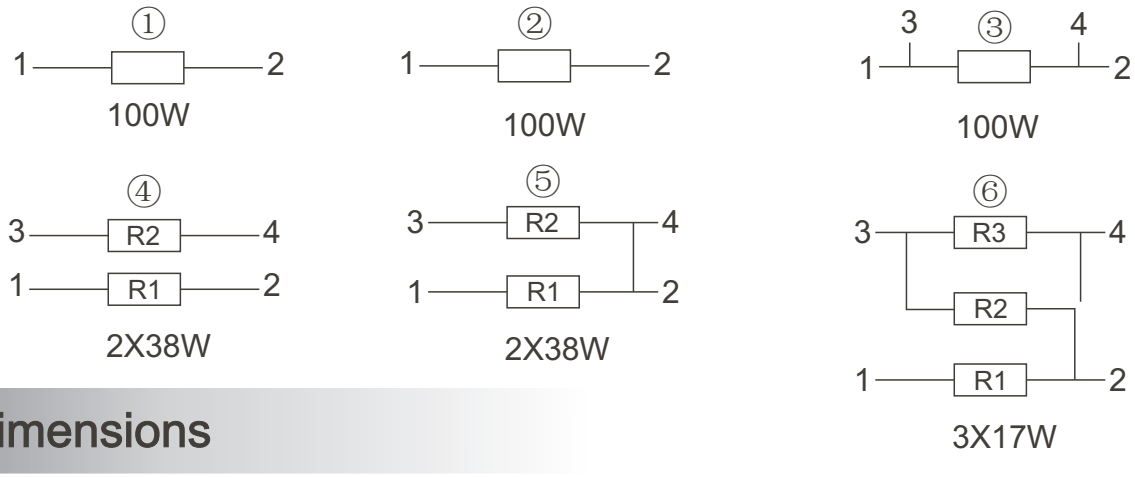
Ⅰ This new design of the non－inductive thick film Metal Oxide Technology with the wire terminals eliminates the possibility for problems regarding creeping distance from terminal to ground.

Ⅱ Best results can be reached by using a thermal transfer compound with a heat conductivity of better than 1W/mK. The flatness of the cooling plate must be better than 0.05mm overall. The roughness of the surface should not exceed 6.4μm.

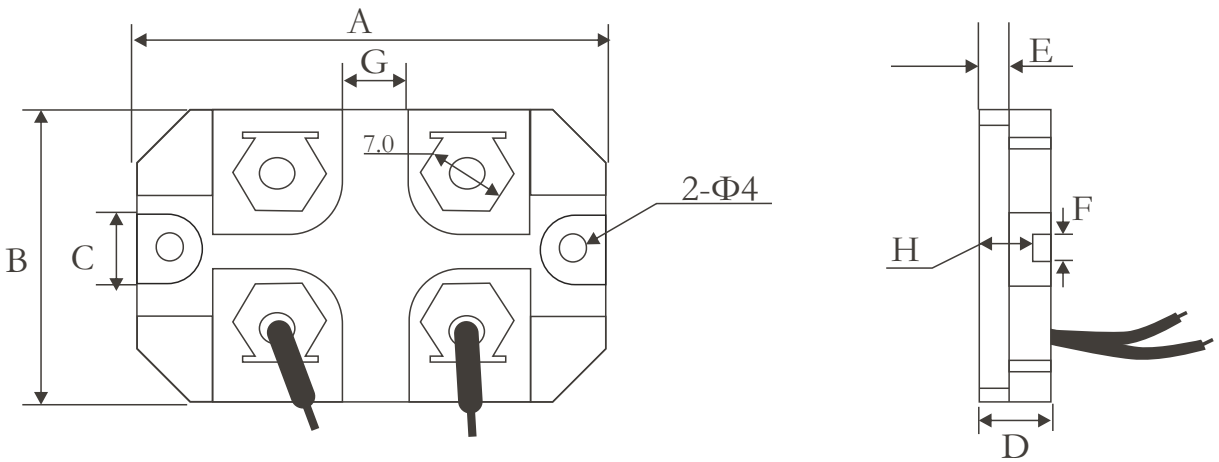
Application

This unique design will allow you to use this element in the following areas:Variable Speed Drives;Power Supplies; Control Devices; Telecommunications; Robotics; Motor Controls and other Switching Devices.

Construction



Dimensions



E347603 3239 18AWG 3KV-DC 150℃ VW-1

Type	Power (W)	Dimensions							
		A	B	C	D	E	F	G	H
MCB	100	40±1.0	26.0±1.0	9.0±0.5	11.0±0.5	4.8±0.5	1.6±0.5	4.45±0.5	8.5±0.5

Reference Standards

JISC 5201-1

Ordering Information

Example:

MCB100	200	F	100R0
(1)	(3)	(4)	(5)
Series Name	Power Rating	Resistance Tolerance	Resistance

(1)Type: MCB100 Series

(2)Power Rating: 100=100W

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

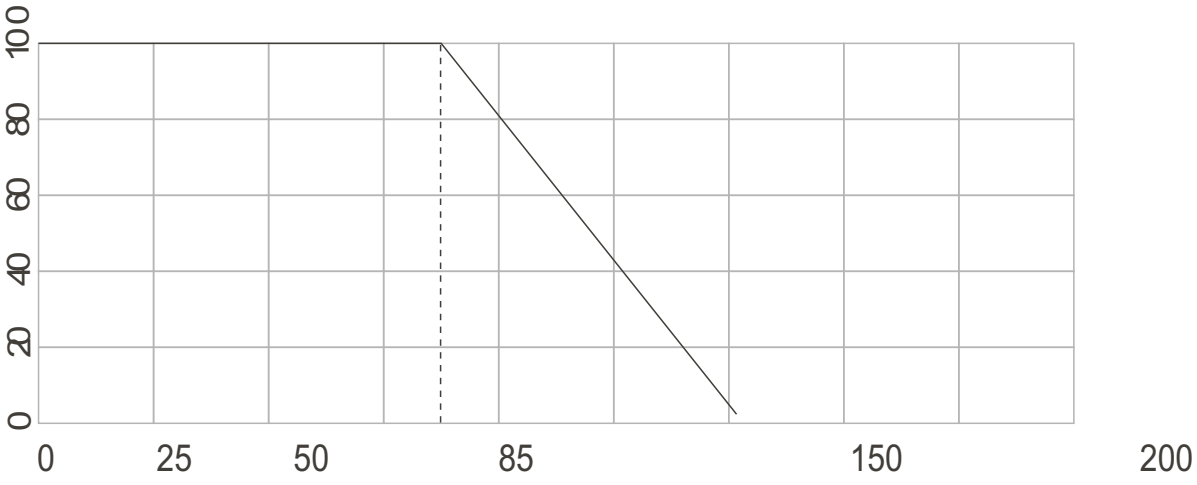
(4)Resistance Value:0R100=0.1Ω,0R200=0.20Ω,10R00=10Ω,10K00=10KΩ

Applications And Ratings

Type	Power (W)	Resistance Range(Ω)	Tolerance	Maximum working voltage	TCR	Temperature range
MCB100	100W	1Ω～1MΩ	±1% ~ ±10%	500V DC	±50ppm/℃ ±100ppm/℃ ±250ppm/℃	-55℃～+155℃

Derating Curve

(1)Position component and press down by hand.
(2)Fix both mounting screws (M4) with 0.1 to 0.2 Nm torque.
(3)Apply final torque to mounting screws of 1.0 to 1.2 Nm max.



Bottom-Case Temperature, ° C

Derating (thermal resistance):1.42W/° K (0.70° K/W).(for conf. 1, 2 and 3)

Performance

Test Items	Test MethodsJIS C 5201-1
Resistance Range:	1Ω to 1MΩ
Standard tolerance:	±1% to ±10%
Temperature coefficient:	±50, ±100ppm, ±250ppm (at+105℃ ref. to +25℃)
Max. Work. Voltage:	500V(up to 1,500V DC on special request)
Power rating:	at 85° C BCT
Short Time Overload:	1.5 x rated power for 10 sec,ΔR = 0.4% max. (for conf. 1, 2and 3)
Standard wire length:	L = 100mm(other lenghts are available on special request)
Electric strength:	5kV DC (3kV AC higher values on request
Max. Torque:	1.2Nm
Working temp. range:	- 55 up to 155 ° C