

● Product Presentation

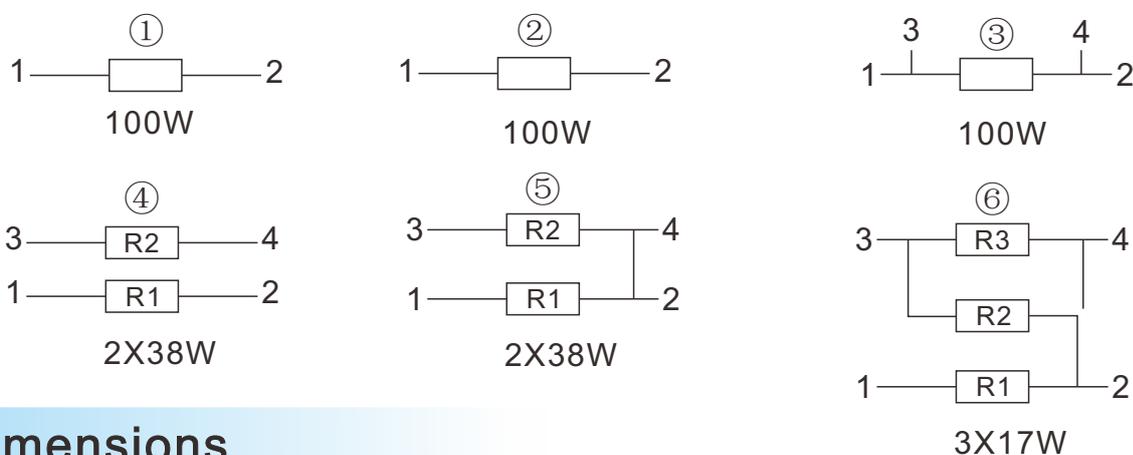
This new design of the non – inductive thick film Metal Oxide Technology with the wire terminals eliminates the possibility for problems regarding creeping distance from terminal to ground.

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.

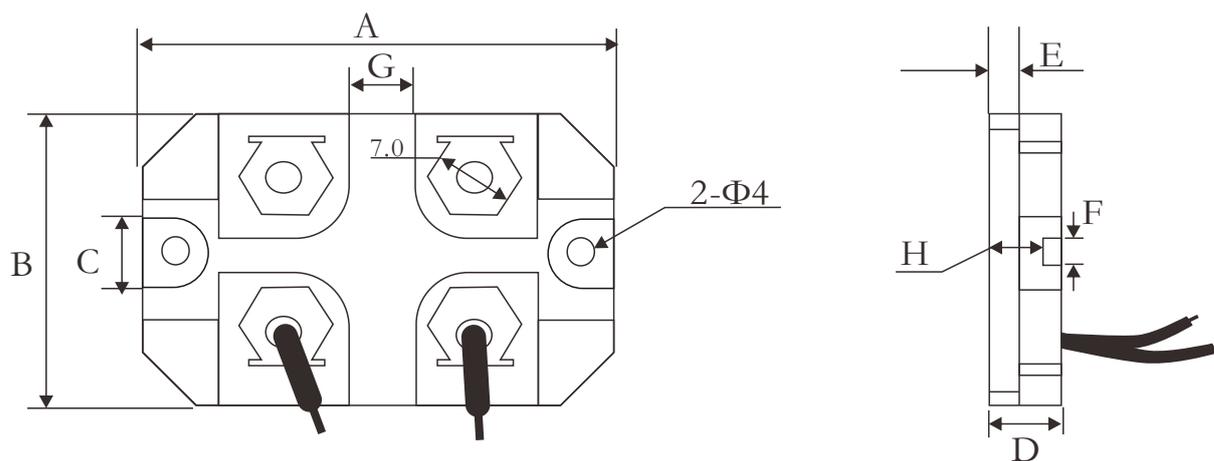
● Applications

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°C 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%

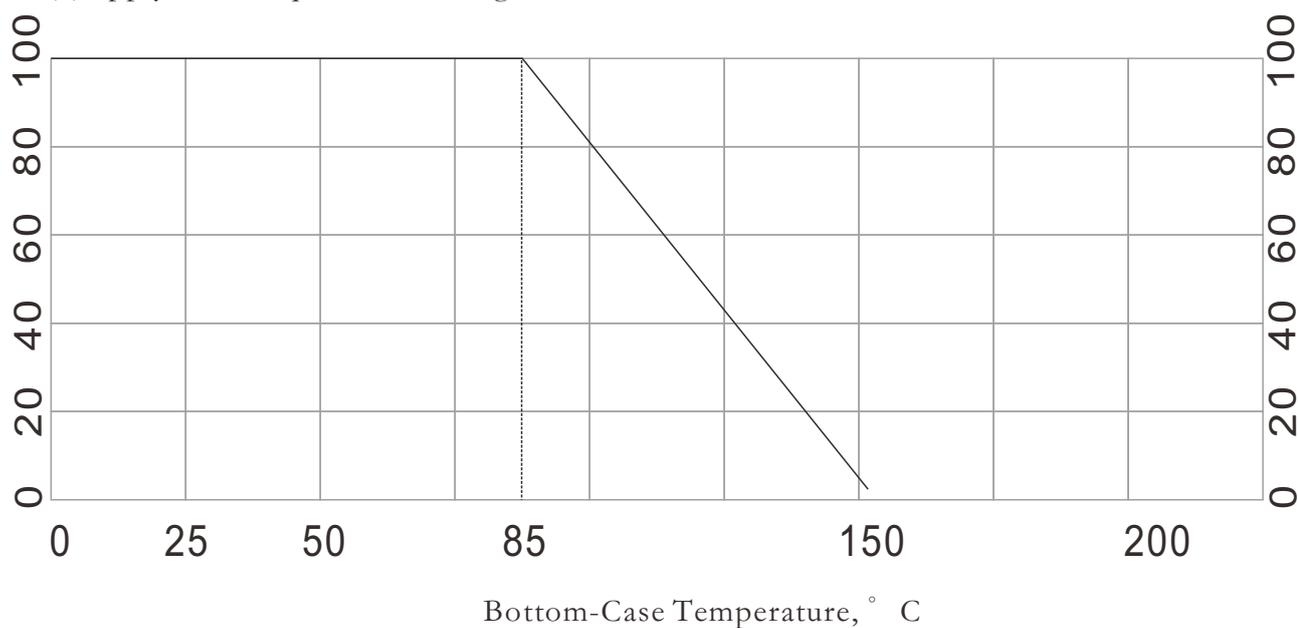
(4)Resistance Value:0R100=0.1Ω,0R200=0.20Ω,10R00=10Ω,10K00=10KΩ

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/°C ± 100ppm/°C ± 250ppm/°C	-55°C ~ +155°C

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.



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°C ref. to +25°C)
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