



# OMRON G7EB PCB POWER RELAY

## Cool running high-power relay



The OMRON G7EB has a switching capacity up to 100A at 800VAC, as well as 100A at 60VDC. Its ultra-low 5mΩ contact resistance greatly reduces heat generation within the component and minimizes energy waste. As a result, the G7EB experiences a temperature rise to about +40°C with a 100A carry current. This 40.5 x 50.5 x 37mm relay helps reduce overall system size, while its reduced requirement for heat sinks, as a result of its cool operation, yields further space savings for the system designers.

The G7EB is aimed at distribution power conditioning systems (PCS), EV chargers and inverters, as well as test equipment such as semiconductor testers. It is available with both industry standard and OMRON proprietary pin layouts.

### Key Features

- Switching capacity: 100A at 800VAC; 100A at 60VDC
- Low contact resistance (5mΩ)
- Ambient temperature 85°C
- 10kV impulse withstand voltage
- Contact gap ≥3.6mm

### Key Benefits

- Reduces heat generation
- Energy efficient
- Helps reduce overall system size

### Key Applications

- Power conditioning systems (PCS)
- EV chargers
- Inverters
- Uninterruptible power supply (UPS)
- Test & measurement equipment





# OMRON G9KA PCB POWER RELAY

## Enabling efficient PCS Design



The OMRON G9KA is a compact and efficient 800VAC/200A high power relay aimed at power conditioners (PCS) associated with renewable micro-power generation, as well as EV chargers, inverters and UPS applications. It is an ideal relay solution for grid interconnection and safety interruption in applications demanding high energy efficiency and low heat generation. The G9KA benefits from an exceptionally low contact resistance for this class of relay of just 0.2m $\Omega$ , reducing the heat generated in the relay by over 30% compared with current equivalent devices. This facilitates the thermal design and reduces design cost.

### Key Features

- 800VAC/200A breaking
- Low initial contact resistance (0.2m $\Omega$ )
- Ambient temperature up to 85°C
- 10kV impulse withstand voltage
- Contact gap  $\geq$ 4.0mm

### Key Applications

- Power conditioning systems (PCS)
- EV chargers
- Inverters
- Uninterruptible power supply (UPS)

### Key Benefits

- Low contact resistance
- 30% lower heat generation compared with current equivalent devices
- Facilitating thermal design & reducing design costs

