

1 Pin Configuration and Functionality

1.1 Pin Configuration with PG-TO220-6-247

| Pin | Symbol | Function |
|-----|--------|--|
| 1 | Drain | 650V ¹⁾ CoolMos [®] Drain |
| 2 | CS | Current Sense/ 650V ¹⁾ CoolMOS [®] Source |
| 3 | BA | extended Blanking & external Auto Restart enable |
| 4 | VCC | Controller Supply Voltage |
| 5 | GND | Controller Ground |
| 6 | FB | Feedback |

¹⁾ at T_j=110°C

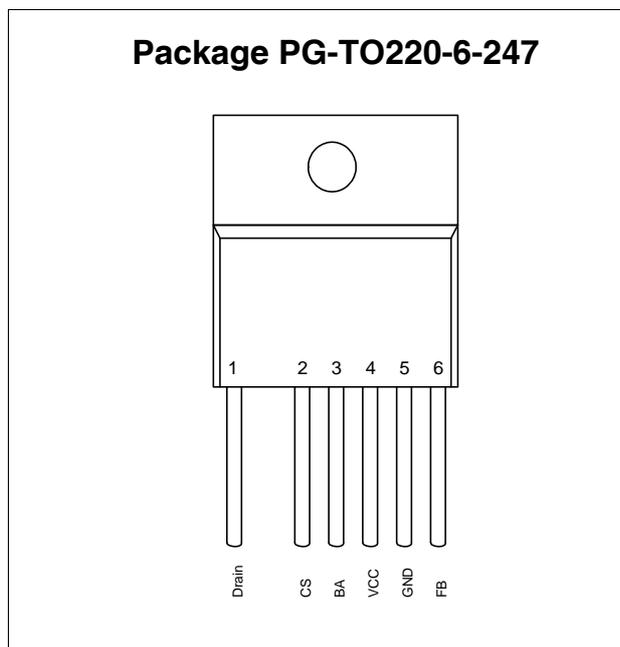


Figure 1 Pin Configuration PG-TO220-6-247 (front view)

1.2 Pin Functionality

Drain (Drain of integrated CoolMOS[®])

Pin Drain is the connection to the Drain of the internal CoolMOS[®] and the HV of the startup cell.

CS (Current Sense)

The Current Sense pin senses the voltage developed on the series resistor inserted in the source of the integrated CoolMOS[®]. If CS voltage reaches the internal threshold of the Current Limit Comparator, the Driver output is immediately switched off. Furthermore the current information is provided for the PWM-Comparator to realize the Current Mode.

BA (extended Blanking & Auto-restart enable)

The BA pin combines the functions of extendable blanking time for over load protection and the external auto-restart enable. The extendable blanking time function is to extend the built-in 20 ms blanking time by adding an external capacitor at BA to ground. The external auto-restart enable function is an external access to stop the gate switching and force the IC to enter auto-restart mode. It is triggered by pulling down the BA pin to less than 0.33V.

VCC (Power Supply)

The VCC pin is the positive supply of the IC. The operating range is between 10.5V and 25V.

GND (Ground)

The GND pin is the ground of the controller.

FB (Feedback)

The information about the regulation is provided by the FB Pin to the internal Protection Unit and to the internal PWM-Comparator to control the duty cycle. The FB-Signal is the only control signal in case of light load at the Active Burst Mode.