

JW7221/JW7221L

Positive High-Voltage Hot Swap and

Inrush Current Controller With Power Limiting

DESCRIPTION

The JW®7221 and JW®7221L are positive hot swap controllers that allows a board to be safely inserted and removed from a live backplane or other hot power sources. JW7221/W7221L offers inrush current control to protect MOSFET against system voltage droop and transients. The function of power limit protection allows better utilization of the external MOSFET's SOA. An external capacitor connected from TMR to GND establishes the timeout period to declare a fault condition and Gate is turned off when timeout condition occurs. The POWER GOOD keeping high declares MOSFET is turned on. The under voltage and over voltage protection threshold can be programmed via external resistor dividers. The JW7221L provide latch off mode after a fault condition occurs while JW7221 provide automatically restart mode.

JW7221 and JW7221L are available in a 10-pin MSOP package.

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FEATURES

- Wide operating range: 9 V to 80 V
- Inrush current limit protection
- Programmable power limit
- Adjustable current limit: 55mV±11%
- Circuit breaker function for severe overcurrent events
- Internal high side charge pump and gate driver for external N-channel MOSFET
- Adjustable under-voltage lockout (UVLO) and hysteresis
- Adjustable over-voltage lockout (OVLO) and hysteresis
- Initial insertion timer allows ringing and transients to subside after system connection
- Programmable fault timer
- Active high open drain power good output
- Available in latched fault and automatic restart versions
- 10-Pin MSOP package

APPLICATIONS

- Server Backplane Systems
- Base Station Power Distribution Systems
- Solid State Circuit Breaker
- 24-V and 48-V Industrial Systems

TYPICAL APPLICATION

