



# JW7201

## Positive High Voltage Ideal Diode-OR With Input Supply and Fuse Monitors

*Parameters Subject to Change Without Notice*

### DESCRIPTION

The JW<sup>®</sup>7201 is a positive voltage ideal diode-OR controller that drives two external N-channel MOSFETs. Forming the diode-OR with N-channel MOSFETs instead of Schottky diodes reduces power consumption, heat dissipation and PC board area.

With the JW7201, power sources can easily be ORed together to increase total system reliability. The JW7201 can diode-OR two positive supplies or the return paths of two negative supplies, such as in a -48V system.

In the forward direction the JW7201 controls the voltage drop across the MOSFET to ensure smooth current transfer from one path to the other without oscillation. If a power source fails or is shorted, fast turnoff minimizes reverse current transients.

Power fault detection indicates if the input supplies are not in regulation, the inline fuses are blown, both of the External N-Channel gate drive(VGSx) are less than 0.3V, or the voltages across the MOSFETs are greater than the fault threshold.

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### FEATURES

- Replaces Power Schottky Diodes
- Controls N-Channel MOSFETs
- 0.3 $\mu$ s Turn-Off Time Limits Peak Fault Current
- Wide Operating Voltage Range: 6V to 80V
- Smooth Switchover without Oscillation
- No Reverse DC Current
- Monitors VIN, Fuse, and MOSFET Diode
- Available in 14-Lead (4mm  $\times$  3mm) DFN, 16-Lead SOP Packages

### APPLICATIONS

- High Availability Systems
- Advanced TCA<sup>®</sup> (ATCA) Systems
- +48V and -48V Distributed Power Systems
- Telecom Infrastructure