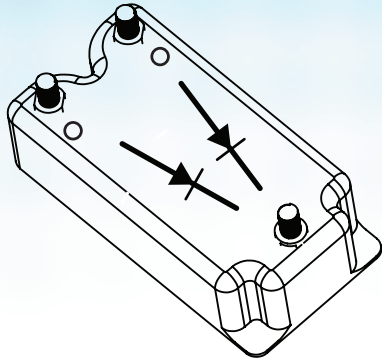


# POWER-GATE™ Solid-State Devices

## OR'ing Diode



**25 to 300 AMPS**  
**12 and 24 Volts**

OR30036BB (24 volts, all LEDs)  
OR30036BB-0010B (24 volts, all LEDs, EMI Compliant)

POWER-GATE OR'ing diodes "OR" two sources to a single load and are used to isolate redundant power sources so a failure of one source doesn't bring down the whole system.

For example, a system may have a critical piece of equipment powered by a DC power supply OR a backup battery bank. If the DC power supply should ever fail, the backup battery bank will instantly become the source of power for the critical piece of equipment; whichever source is more positive will be "OR'ed" to the load.

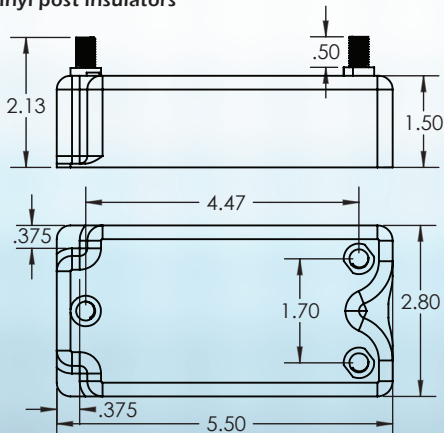
POWER-GATE OR'ing diodes provide high performance and reliable switching without the conductive losses and leakage typical to Schottky rectifiers.

Conventional silicon and Schottky rectifiers are attractively priced, but have significant performance issues:

- substantial voltage drop as current passes
- conductive losses create significant heat
- batteries never get fully charged
- alternator regulators always inaccurate due to diode drop

### PACKAGE CHARACTERISTICS:

- ABS shell backfilled with electronics grade epoxy
- Three integrated self-drill mounting flanges
- 5/16-18 x .500" machined brass connection posts
- Integrated Ground Wire
- Vinyl post insulators

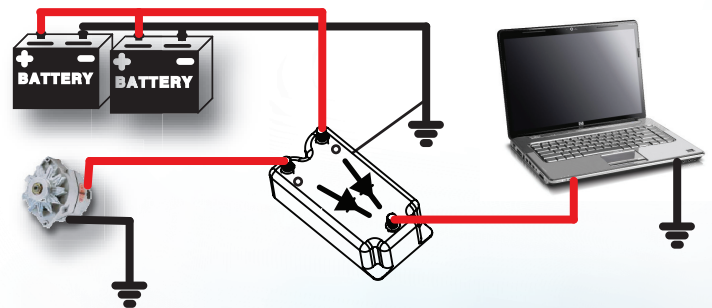
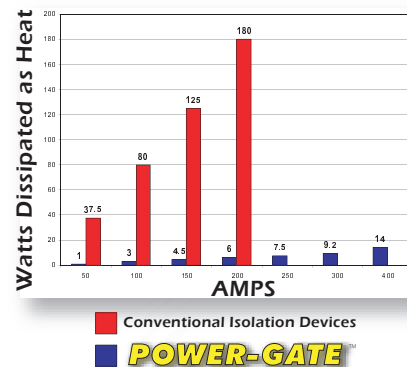


### APPLICATIONS:

An ideal diode designed to switch and control DC. Common uses include military, aeronautic, automotive, marine, industrial machinery, photo voltaic, fleet utility.

### FEATURES and BENEFITS:

- Low voltage, high current capability
- Internationally patented arrayed MOSFET technology
- Optional MIL-STD-461E Compliant
- 99.9% efficiency at max. current
- Fully Encapsulated solid state design
- Light weight
- Dramatically smaller than conventional devices
- Market-leading, ultra-low on-state resistance
- No heat sinks or airflow required
- Analog and micro controller programmable versions
- Quik-turn capability
- Recommended by top battery manufacturers



An OR'ing diode application. The alternator typically supplies power to the mission critical computer while the battery bank is a stored source of redundant power. If the alternator stops creating output, the POWER-GATE™ OR'ing diode will instantly "OR" the battery bank to the computer and effectively provide a redundant, backup source of power. When the alternator re-energizes, the computer will again be powered by the alternator. The POWER-GATE OR'ing diode automatically connects the higher voltage source to the load.