HAD0230

HAD0230 is an integrated solution that combines an N-Channel power MOSFET, low-voltage oscillator, charge pump, and low-power voltage sense unit in a TO-263 package. It's compatible with conventional D2PAK Schottky diodes and offers advantages like low forward voltage, low power consumption, minimal leakage current, and high reverse voltage compared to traditional diodes.

Key features

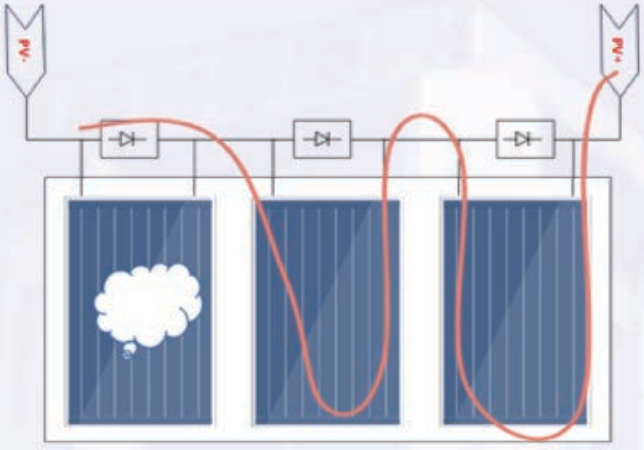
- Maximum Reverse Voltage (V_R) of 100V
- Low Forward Voltage (V_F) of 92mV at 20A Forward Current (I_F)
- Continuous Operation at I_F=20A and 125°C Ambient Temperature (T_A) with Less than 2W Power Consumption
- Low Reverse Leakage Current of 0.2μA at V_R=100V
- Low Reverse Blanking Response Time of 3.5μs with -20mV Source to Drain Voltage (V_{SD})
- ESD class of 4kV (HBM) and 750V (CDM)
- Operating T_A from -40°C to 125°C
- Zero Static Power (I_Q to GND)

Application

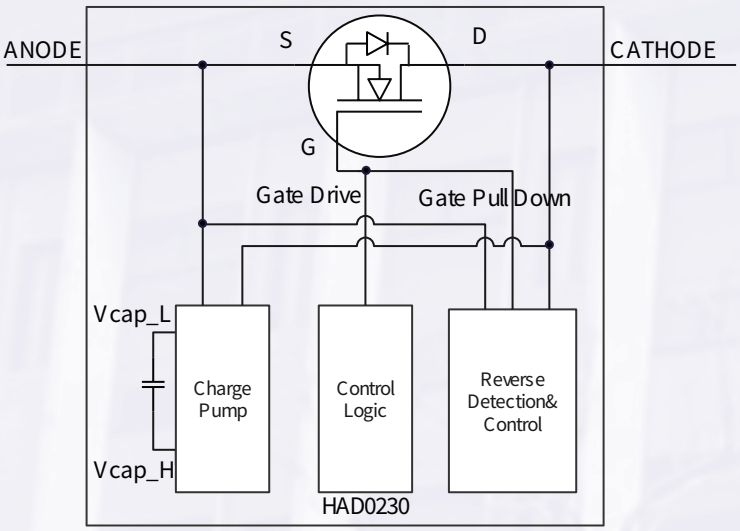
- Photovoltaic Bypass Diodes
- Photovoltaic RSD
- Photovoltaic Optimizer
- Battery Reverse Protection

TO-263 Package

Photovoltaic Junction Box



HAD0230 System Diagram



Battery Reverse Protection