

SMD Power Modules

Gate drivers need exact voltages for the highest efficiency and system reliability. A new range of isolated power modules from RECOM provides an economical and high-performance solution in a tiny 36-pin SSOP SMD package, just 12.83 x 7.5 x 3.55mm.



The isolated modules have multiple input ranges, covering 8.5V to 27VDC for 12V, 15V, and 24VDC nominals with power ratings up to 2.5W, depending on the selected variant and temperature range. Each part has two fully regulated outputs which can be user-programmed as asymmetric positive and negative values, or as a single positive or negative value to suit requirements for a wide range of gate drive voltages for IGBTs, Si and SiC MOSFETs, and GaN cascode HEMT cells. For example, part R12C2T25/R can operate over 9-18VDC input and be programmed for +18V/-5V output to suit a SiC MOSFET. The working temperature ranges from -40°C up to 100°C, with derating depending on the variant. The isolation rating for the series is 5kVAC/1 min reinforced and 1.4kVDC working, with a low isolation capacitance of less than 3.5pF and a dV/dt immunity of 150V/ns.

Extensive control and protection features are included, including input under and over-voltage lockout, over-temperature, and output over-load and under and over-voltage. A shut-down control pin is provided, and a power good signal is available to indicate that the outputs are within acceptable tolerance and the gate drive may be applied safely.

APPLICATIONS:

- Building & Home Automation
- Data & Telecommunications
- Energy
- Industrial & Automation
- Infrastructure

Datasheets and additional information can be found on: <https://recom-power.com>