

FDMF5062

Smart Power Stage (SPS) Modules with Integrated Current and Temperature Monitors

Product Overview

For complete documentation, see the data sheet.

Features

- Up to 70A Instantaneous Peak Current Handling Capability
- High-Performance, Universal Footprint, Copper-Clip 5 mm x 6 mm PQFN Package
- ON Semiconductor’s PowerTrench® MOSFETs for Clean Voltage Waveforms and Reduced Ringing
- 30 V / 25 V Breakdown Voltage MOSFETs for Higher Long-Term Reliability
- Optimized FET Pair for Highest Efficiency at 10% ~ 15 % Duty Cycle
- Optimized for Switching Frequencies up to 1 MHz
- Integrated Current Monitoring (IMON)
- Integrated Temperature Monitoring (TMON)
- Catastrophic Fault Detection Features
- Thermal Flag (OTP) for Over-Temperature Condition

For more features, see the data sheet

Applications

- CPU and Memory Voltage Regulators
- High-Current Multiphase Voltage Regulators
- Artificial Intelligence Add-On Cards
- Server CPUs, Storage, Telecom
- DC/DC Power Module

Part Electrical Specifications

| Product  | Status | Compliance                                                                          | V <sub>GS(IN)</sub> (V)<br>Typ | V <sub>IN</sub> (V)<br>Typ | PWM Level   | I <sub>O</sub> (A)<br>Max | f <sub>max</sub> (MHz)<br>Max | Packa<br>ge<br>Type | Case<br>Outline | MSL<br>Type | MSL<br>Temp<br>(°C) | Contai<br>ner<br>Type | Contai<br>ner<br>Qty. |
|----------|--------|-------------------------------------------------------------------------------------|--------------------------------|----------------------------|-------------|---------------------------|-------------------------------|---------------------|-----------------|-------------|---------------------|-----------------------|-----------------------|
| FDMF5062 | Active |  | 5                              | 12                         | 3.3V,<br>5V | 70                        | 1                             | PQFN-<br>39         | 483BF<br>.PDF   | 1           | 260                 | REEL                  | 3000                  |