



ON Semiconductor®

# FSDM0465RE, FSDM0565RE, FSDM07652RE

## Green Mode Power Switch

### Features

- Internal Avalanche-Rugged SenseFET
- Advanced Burst-Mode Operation Consumes Under 1W at 240V<sub>AC</sub> & 0.5W load
- Precision Fixed Operating Frequency (66kHz)
- Internal Start-up Circuit
- Improved Pulse-by-Pulse Current Limiting
- Over-Voltage Protection (OVP)
- Overload Protection (OLP)
- Internal Thermal Shutdown Function (TSD)
- Auto-Restart Mode
- Under-Voltage Lockout (UVLO) with hysteresis
- Low Operating Current (2.5mA)
- Built-in Soft-Start

### Applications

- SMPS for LCD monitor and STB
- Adaptor

### Description

The FSDM0465RE, FSDM0565RE and FSDM07652RE are an integrated Pulse Width Modulator (PWM) and SenseFET specifically designed for high-performance offline Switch Mode Power Supplies (SMPS) with minimal external components. This device is an integrated high-voltage power-switching regulator that combines an avalanche-rugged SenseFET with a current mode PWM control block. The PWM controller includes an integrated fixed-frequency oscillator, under-voltage lockout, leading-edge blanking (LEB), optimized gate driver, internal soft-start, temperature-compensated precise-current sources for a loop compensation, and self-protection circuitry. Compared with a discrete MOSFET and PWM controller solution, it can reduce total cost; component count, size, and weight; while simultaneously increasing efficiency, productivity, and system reliability. This device is a basic platform well suited for cost-effective designs of flyback converters.

### Ordering Information

Product Number	Package	Marking Code	BV <sub>DSS</sub>	R <sub>DS(ON)</sub> Max.
FSDM0465REWDTU <sup>(1)</sup>	TO-220F-6L (Forming)	DM0465RE	650V	2.6 Ω
FSDM0565REWDTU	TO-220F-6L (Forming)	DM0565RE	650V	2.2 Ω
FSDM07652REWDTU	TO-220F-6L (Forming)	DM07652RE	650V	1.6 Ω

#### Note:

1. WDTU: Forming Type.



All packages are lead free per JEDEC: J-STD-020B standard.

