

Product Overview

FSL126MR: 650V Integrated Power Switch with 67kHz frequency and adjustable current limit for 17W offline flyback converters

For complete documentation, see the data sheet.

The FSL126MR integrated Pulse Width Modulator (PWM) and SenseFET is specifically designed for highperformance offline Switch-Mode Power Supplies (SMPS) with minimal external components. FSL126MR includes integrated high-voltage power switching regulators that combine an avalanche-rugged SenseFET with a current-mode PWM control block. The integrated PWM controller includes: Under-Voltage Lockout (UVLO) protection, Leading-Edge Blanking (LEB), a frequency generator for EMI attenuation, an optimized gate turn-on/turn-off driver, Thermal Shutdown (TSD) protection, and temperaturecompensated precision current sources for loop compensation and fault protection circuitry. The FSL126MR offers good soft-start performance. When compared to a discrete MOSFET and controller or RCC switching converter solution, the FSL126MR reduces total component count, design size, and weight; while increasing efficiency, productivity, and system reliability. This device provides a basic platform that is well suited for the design of cost-effective flyback converters.

Features

- Internal Avalanche-Rugged SenseFET (650V)
- Under 50mW Standby Power Consumption at265VAC, No-load Condition with Burst Mode
- Precision Fixed Operating Frequency withFrequency Modulation for Attenuating EMI
- Internal Startup Circuit
- Built-in Soft-Start: 15ms
- Pulse-by-Pulse Current Limiting
- Various Protections: Over-Voltage Protection(OVP), Overload Protection (OLP), Output-ShortProtection (OSP), Abnormal Over-CurrentProtection (AOCP), Internal Thermal ShutdownFunction with Hysteresis (TSD)
- Auto-Restart Mode
- Under-Voltage Lockout (UVLO)
- Low Operating Current: 1.8mA

For more features, see the data sheet

Applications

- Motion Control - Home Appliance
- Motion Control - Industrial Motor
- Smart Grid
- Smart Meter
- LED TV

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Control Mode	f_{sw} Typ (kHz)	f_{jitter} Typ (%)	Stand-by Mode	$R_{DS(on)}$ Typ (Ω)	V_{DSS} Max (V)	I_{Peak} (mA)	HV Start-up Min (V)	DSS (mA)	UVLO	Short Circuit Protection	Over Power Compensation	Brown-out	Latch	Package Type
FSL126MR	0.4404	Pb-free Halide free non AEC-Q and PPAP	Active	Current Mode	67			4.9	650	1500	Yes		Yes	Yes			No	PDIP-8

For more information please contact your local sales support at www.onsemi.com.

Created on: 6/23/2021