

High Precision CC/CV PSR PWM Controller/Power Switch

OB2535 is a high performance offline PWM Power switch for low power AC/DC charger and adapter applications. It can achieve $\pm 5\%$ precision constant voltage (CV) and high precision constant current (CC). It operates in primary-side sensing and regulation. Consequently, opto-coupler and TL431 could be eliminated.

Features:

- ◆ $\pm 5\%$ constant voltage regulation at universal AC input
- ◆ Primary-side sensing and regulation without TL431 and opto-coupler
- ◆ Programmable CV and CC regulation
- ◆ Adjustable constant current and output power setting
- ◆ Built-in primary winding inductance compensation
- ◆ Programmable cable drop compensation
- ◆ Power on soft-start
- ◆ Built-in leading edge blanking (LEB)
- ◆ Cycle-by-Cycle current limiting
- ◆ VDD under voltage lockout with hysteresis (UVLO)
- ◆ VDD OVP
- ◆ VDD clamp
- ◆ Available in SOP8 packages, RoHS compliant

Applications:

- ◆ CC/CV Battery Charger
- ◇ Cell/Cordless Phone Charger
- ◇ Digital Camera Charger
- ◇ PDA Charger
- ◆ Small Power Adapter
- ◆ Auxiliary Power for PC, TV etc.
- ◆ Linear Regulator/RCC Replacement

Device	MOSFET R _{dson} (ohm)	Package	Max Pout(W) note	Max Pout (W) (85~264V)	Frequency
OB2531	External	SOT23-6	--	--	95kHz
OB2532	External	SOT23-6	--	--	60kHz
OB2535/E	12	SOP8	10	5	60kHz
OB2536/E	12	DIP8	16	9	60kHz
OB2538/E	5	DIP8	20	15	60kHz
OB2539	5	DIP8	18	13	95kHz

Note: Maximum practical continuous power in an open frame design with sufficient drain pattern as a heat sink, at 50°C ambient, 230Vac input.

Typical Application: