



Current mode PWM controller with integrated high voltage power MOSFET LY9523/LY9525/LY9526/LY9527/LY9528

GENERAL DESCRIPTION

LY9523/LY9525/LY9526/LY9527/LY9528

combines a dedicated current mode PWM controller with integrated high voltage power MOSFET.

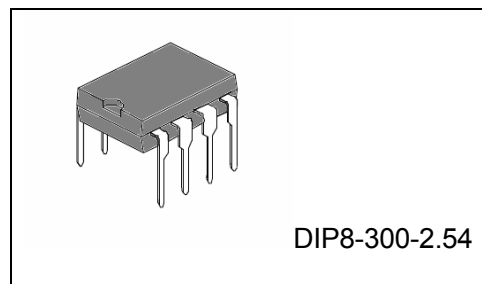
Vcc low startup current and low operating current contribute to a reliable power on startup

design with LY9523/LY9525/LY9526/LY9527/LY9528. the IC operates in Extended 'burst mode' to minimize switching loss. Lower standby power and higher conversion efficiency is thus achieved.

LY9523/LY9525/LY9526/LY9527/LY9528 operates in the fixed PWM frequency ,the frequency is 65KHz.

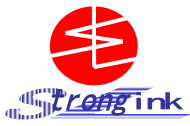
Excellent EMI performance is achieved with proprietary frequency huffling technique.

Soft Start with 4mS,LY9523/LY9525/LY9526/LY9527/LY9528 offers complete protection coverage with automatic self-recovery feature including Vcc over voltage clamp and under voltage lockout (UVLO), over voltage protection(OLP),over current protection (OCP).LY9523/LY9525/LY9526/LY9527/LY9528 is offered in DIP-8 package.



FEATURES

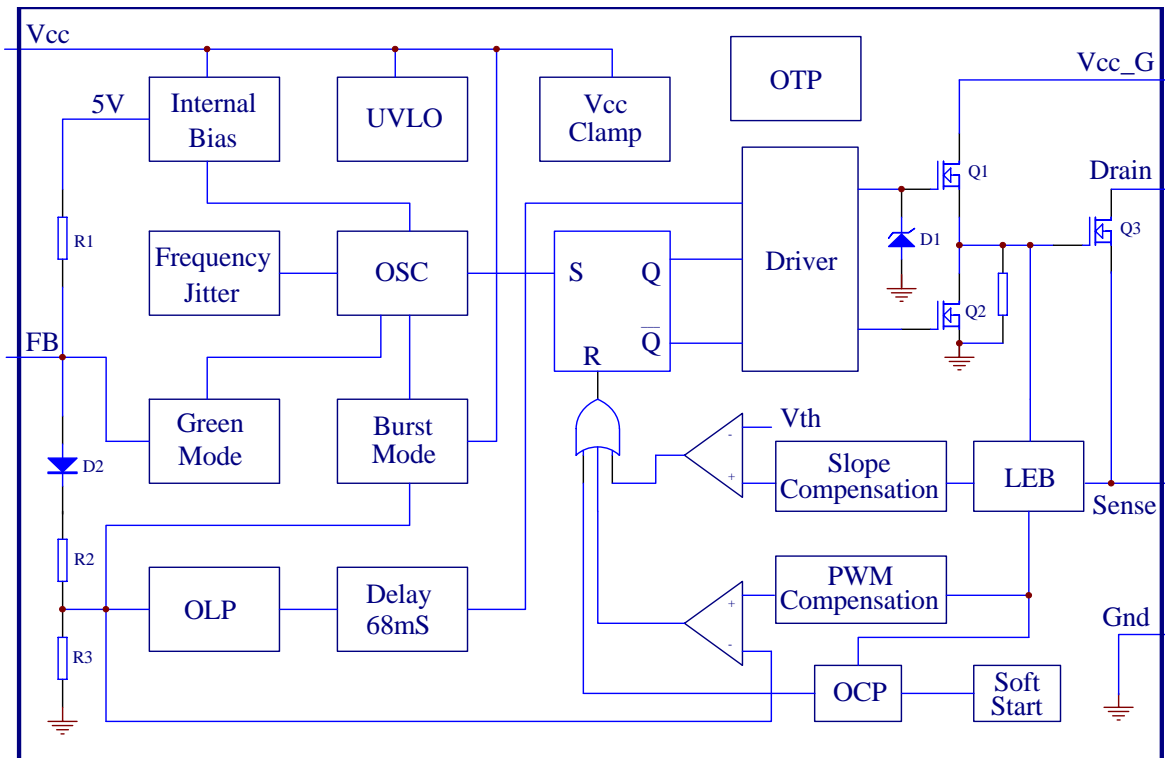
- Integrated high voltage power MOSFET
- Low Vcc Startup Current(5 μ A)
- "No Y-CAP" system design in sub 20W range
- Frequency shuffling for EMI
- Over current Protection(OCP),over voltage Protection(OVP)
- UVLO and Auto Self- Recovery
- Soft Start with 4mS
- Burst Mode
- Cycle-by-Cycle Over-current limiting
- OTP



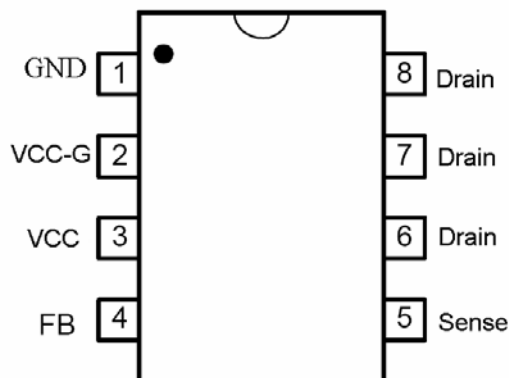
APPLICATIONS

- DVD/DVB/Set-Top Box Power Supplies
- Offline AC/DC Flyback converter
- Battery Charger
- Open-frame SMPS

BLOCK DIAGRAM



PIN CONNECTION





PIN DESCRIPTIONS

Pin No.	Pin Name	Descriptions
1	GND	Ground
2	Vcc-G	Power Supply specially for Internal Gate Driver
3	Vcc	power supply pin
4	FB	Feedback input pin
5	Sense	Current sense input pin
6, 7, 8	Drain	The Drain pin is designed to connect directly to the primary lead of the transformer and is capable of switching a maximum of 650V

OUTPUT POWER TABLE

Name	190V ~ 260V		85V ~ 265V	
	Adapting	Opening	Adapting	Opening
LY9523	6W	8W	5W	7W
LY9525	10W	14W	8W	12W
LY9526	20W	24W	15W	20W
LY9527	22W	28W	20W	24W
LY9528	24W	30W	24W	28W

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Characteristics	Symbol	Value	Unit	
Drain Input Voltage	V_{Drain}	650	V	
Vcc-G Voltage	V_{GS}	±20	V	
Vcc zener clamp continuous current	LY9523	I_D	0.80	A
	LY9525	I_D	1.0	A
	LY9526	I_D	2.0	A
	LY9527	I_D	3.0	A
	LY9528	I_D	4.0	A
Power Supply Voltage	V_{VCC}	25	V	
V_{FB} Maximum Input Voltage		-0.3 ~ 7.0	V	