

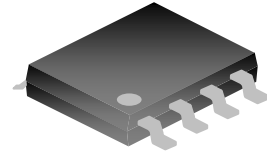
SYNCHRONOUS RECTIFIER CONTROLLER IC WITH BUILT-IN TYPE-N POWER MOSFET

1. DESCRIPTION

The SD8512C is a synchronous rectifier (SR) controller IC with built-in type-N power MOSFET. It can operate cooperating with the primary side control circuit for high system efficiency.

The SD8512C is highly integrated IC for saving peripheral components, and simplifying system design. It is suitable for discontinuous conduction mode and boundary conduction mode. With its versatility, the SD8512C can be used in various topologies

The SD8512C is optimized for 5V output voltage, the output can be used as power supply directly.



SOP-8-225-1.27

2. FEATURES

- ◆ Built-in type-N power MOSFET
- ◆ Up to 40V drain-source breakdown voltage
- ◆ Minimum off time protection
- ◆ Up to 100KHz operation frequency

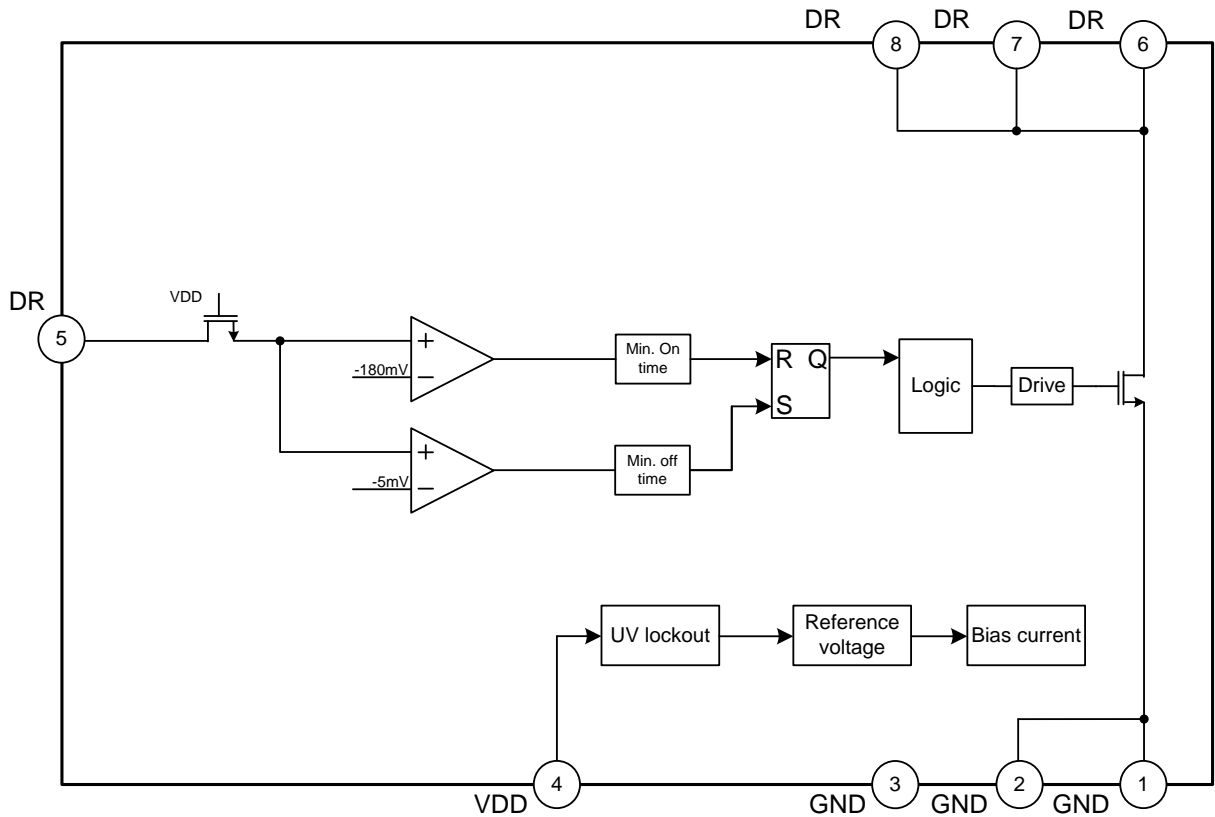
3. APPLICATIONS

- ◆ Adapters
- ◆ Chargers
- ◆ Standby Power Supply

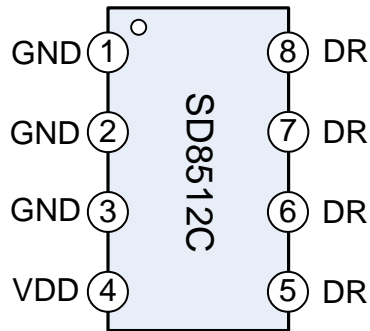
4. ORDERING INFORMATION

Part No.	Package	Marking	Hazardous Substance Control	Packing Type
SD8512C	SOP-8-225-1.27	SD8512C	Halogen free	Tube
SD8512CTR	SOP-8-225-1.27	SD8512C	Halogen free	Tape & Reel

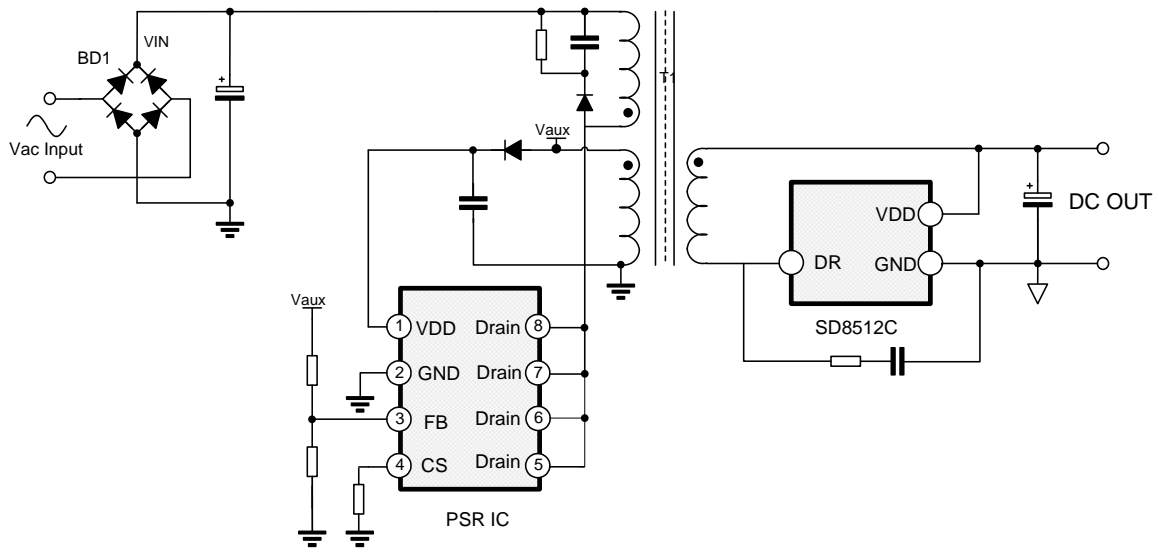
5. BLOCK DIAGRAM



6. PIN CONFIGURATION



7.TYPICAL APPLICATION CIRCUIT



8.PACKAGE OUTLINE

SOP-8-225-1.27 UNIT: mm

SYMBOL	MILLIMETER		
	MIN	NOM	MAX
A	1.35	1.55	1.75
A1	0.05	0.15	0.25
A2	1.25	—	1.65
b	0.32	0.42	0.52
c	0.15	0.20	0.26
D	4.70	4.90	5.30
E	5.60	6.00	6.40
E1	3.60	3.90	4.20
e	1.27BSC		
L	0.30	—	1.27

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