

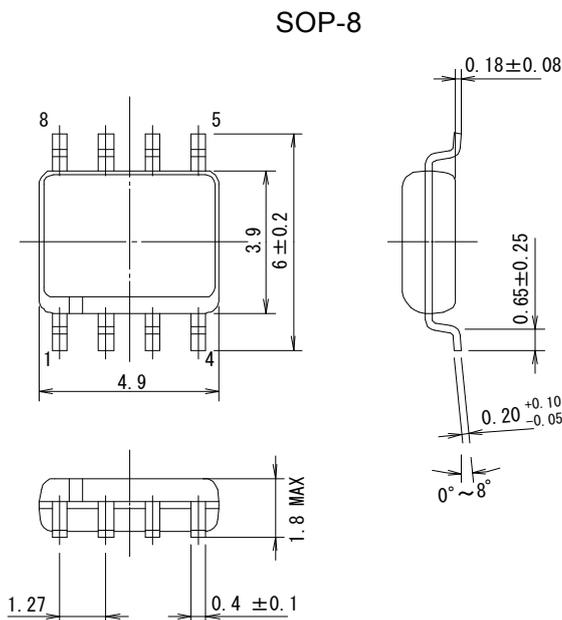
## 1. Description

FA5695/FA5696 is power-factor correction converter IC operating in critical conduction mode. It realizes low power consumption by using high voltage CMOS process. It is equipped with many fault protection functions such as FB short-circuit detection circuit and double OVP function.

## 2. Features

- Very Low Standby Power by disusing Input Voltage Detection Resistors
- High-precision over current protection :  $0.6V \pm 5\%$
- Improved power efficiency at light load due to Maximum Frequency Limitation
- No Audible Noise at Startup  
Soft-Startup and Soft-OVP functions
- Low current consumption by CMOS process  
Start-up :  $80\mu A(\text{max.})$ , Operating :  $2\text{mA}(\text{typ.})$
- Enabled to drive power MOSFET directly  
Output peak current, source :  $1000\text{mA}$ , sink :  $1000\text{mA}$
- Protects the output electrolytic capacitor by the double OVP function, even if a fault happen in the output detection.
- Open/short protection at feedback (FB) pin
- Under-voltage Lockout: FA5695 :  $13\text{V ON} / 9\text{V OFF}$  FA5696 :  $9.6\text{V ON} / 9\text{V OFF}$
- Restart timer
- Standby function
- 8-pin package (SOP)

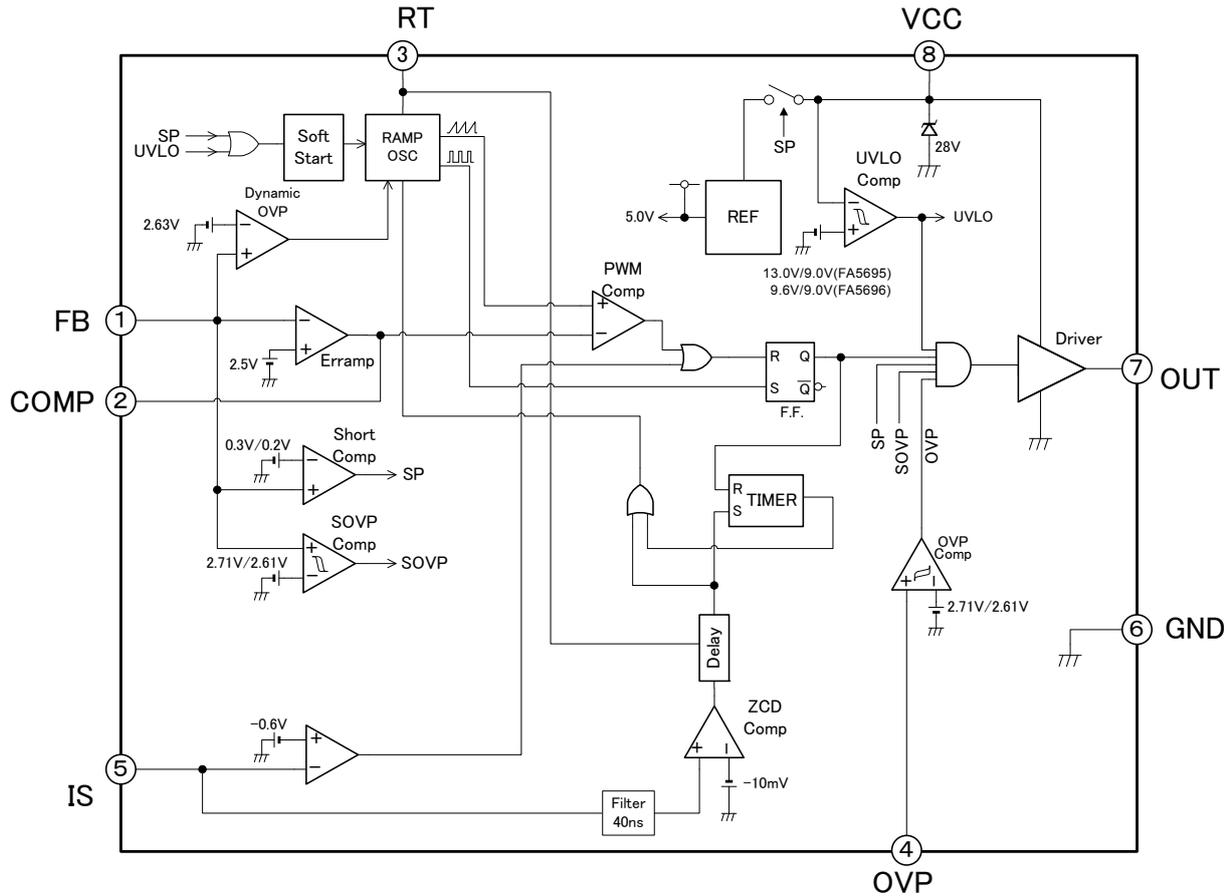
## 3. Outline



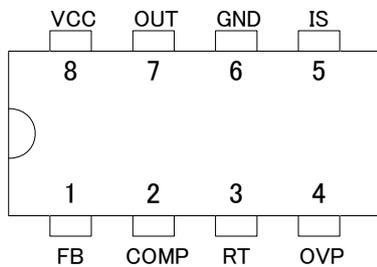
## 4. Type of FA5695/96

Type	Startup Threshold	Package
FA5695N	13V(typ.)	SOP-8
FA5696N	9.6V(typ.)	SOP-8

### 5. Block diagram



### 6. Pin assignment



Pin No.	Pin symbol	Function	Description
1	FB	Feedback Voltage Input	Input for monitoring PFC output voltage
2	COMP	Compensation	Output of error amplifier
3	RT	Set Maximum on time	Set Maximum on time by connecting resistor
4	OVP	Over voltage detection	Monitor the output of converter and protects from over voltage
5	IS	Current Sense Input	Input for sensing current
6	GND	Ground	Ground
7	OUT	Output	Output for driving a power MOSFET
8	VCC	Power Supply	Power supply for IC