

FA3641/47

Description

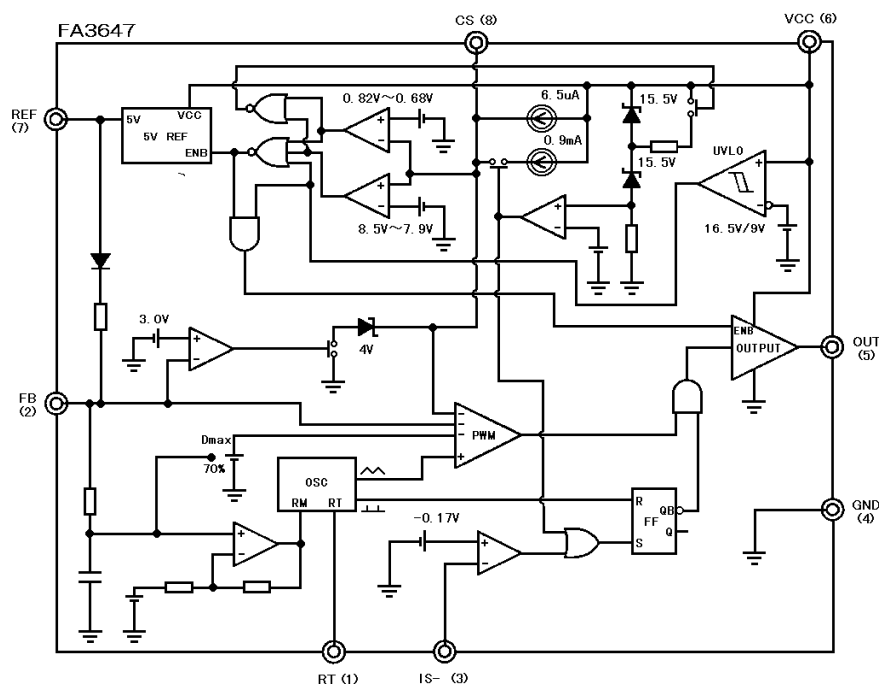
- These are CMOS voltage mode IC's for off-line converter.
- These IC's are optimum for the converter which is required high efficiency at standby or no-load because operating frequency decreases automatically at light-load and the operating current is low.

Features

- Low current consumption by CMOS process
standby: $2\ \mu\text{A}$ (max.), operating: 1.9mA (typ.)
- Operating frequency decreases automatically in order to reduce the switching loss at light-load.
- Overvoltage protection function detecting the Vcc voltage
- Direct driving circuit for a power MOSFET (source: 0.5A, sink: 1A)
- Pulse-by-pulse overcurrent protection function
- Overload cutoff function (latch or non-latch)
- ON/OFF control function by external signal
- UVLO function
- Package: DIP-8/SOP-8

FA3641/47

Block diagram



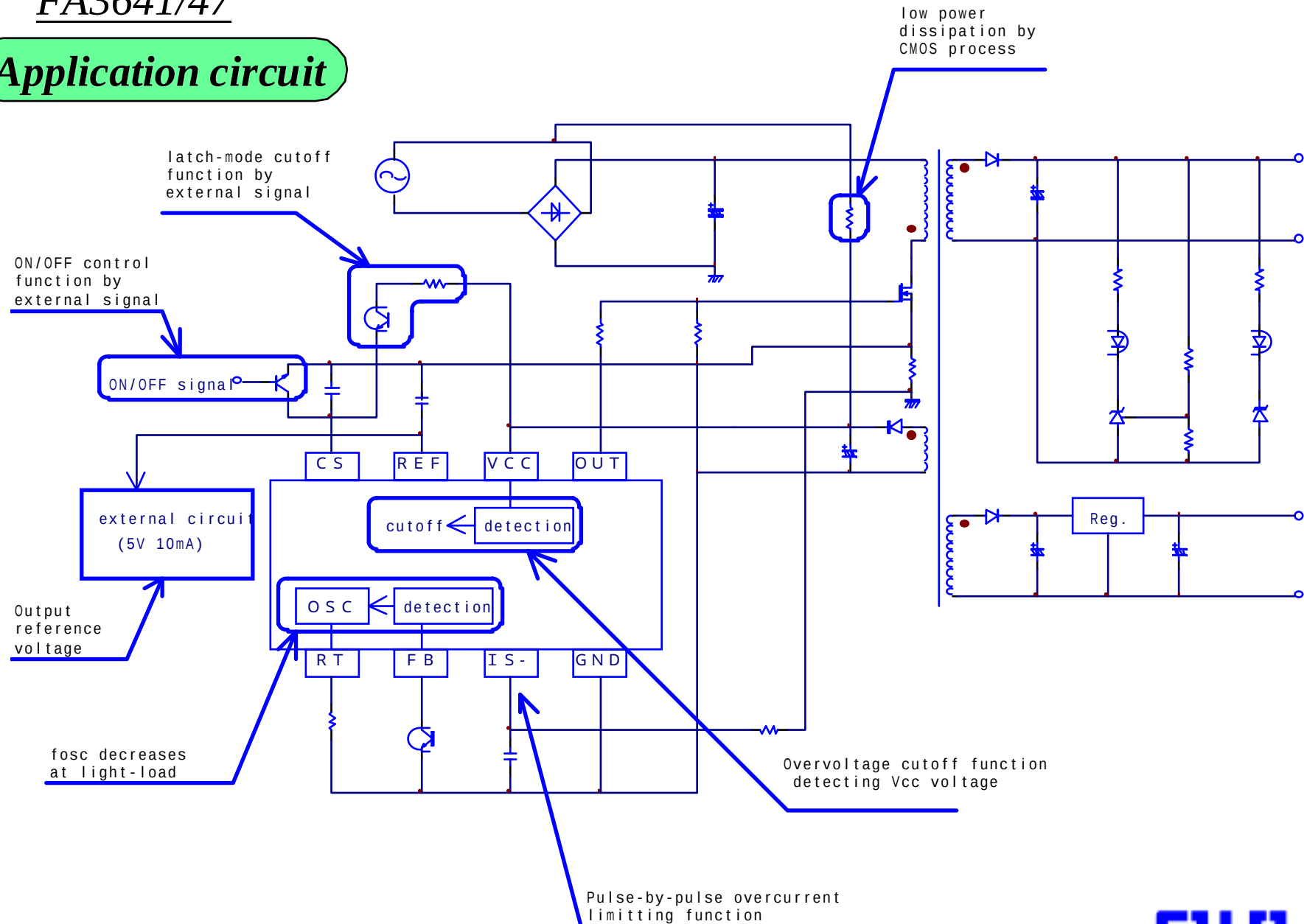
FA3641 : IS is + detection

Electrical characteristics

Item		Characteristics
Supply voltage		10 to 28VDC
Output current	Source	500mA
	Sink	1A
Oscillation frequency	Normal-load	30kHz to 500kHz
	Light-load	More than 10kHz
Reference voltage		5V±5%
Dmax		70%
fosc decrease function	FB terminal voltage when fosc start decrease	1.18V
	Lowest frequency (FB=1V)	0.46*fosc (adjustable)
Overcurrent detection	FA3641	+
	FA3647	—
Junction temperature		-30 to +125°C
Storage temperature		-40 to +150°C

FA3641/47

Application circuit



FA3641/47

Efficiency vs. Output power

