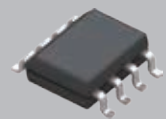




The AC/DC PWM Control IC FA8A80/90 Series offers the best system for flyback circuits. With a rich variety of functions integrated in the small-sized package of SOP8 it makes excellent cost performance via a compact power supply design that leads to good energy saving at light loads.

- Equipped with the power-off mode for achieving low standby power
- High efficiency is attained by a switching frequency reduction adjustment
- Reduced acoustic noise generation by a burst operation starting point adjustment
- Available in both 65 kHz and 100 kHz

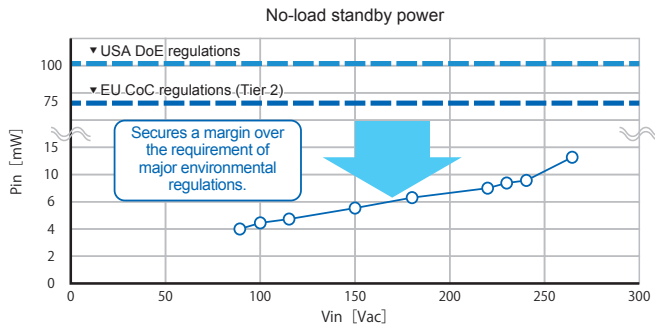


Package: SOP8

Applications (for flyback circuits)
Office automation equipment, AC adapters,
Auxiliary power supplies, LCD TVs, etc.

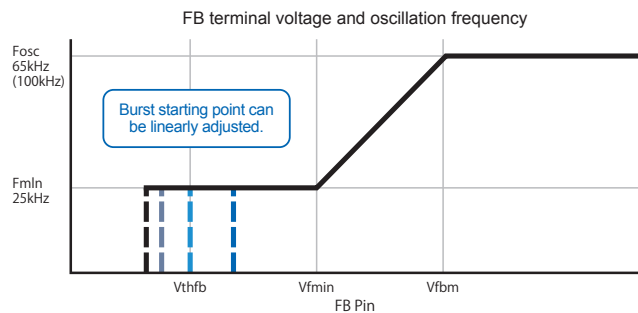
1. Achieves low standby power (equipped with power-off mode)

It achieves low standby power with its power-off mode. It is also capable of clearing the energy-saving standards for external power supplies such as DoE*1 and CoC*2 even securing some margin.



3. Burst starting point can be adjusted

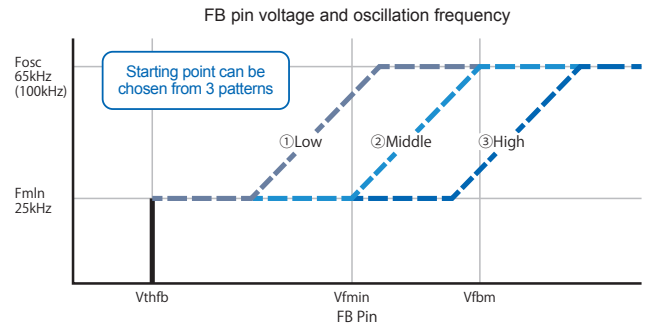
The burst starting point can be continuously adjusted, which makes it easy to improve efficiency at light loads and implement measures for acoustic noise reduction.



*1 DoE (Department of Energy): The energy-saving regulations in the United States that stand in for the Energy Star program promoted by the United States Department of Energy.
*2 CoC (Code of Conduct): Abbreviation for the EU Code of Conduct. Tier 2 became effective in January 2016 as a replacement of the EuP directive.

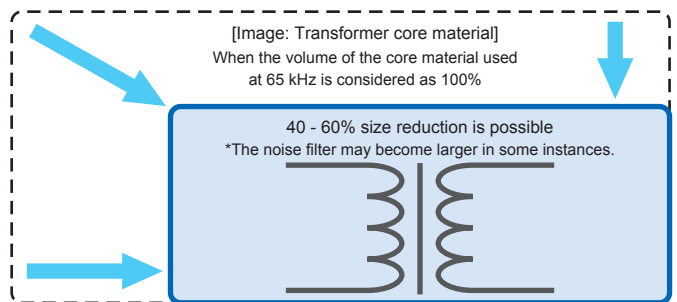
2. Switching frequency reduction adjustment is available

The frequency reduction starting point can be chosen from three patterns, which makes it possible to improve efficiency for the power supply capacity.



4. Reduced size of the power supply (100 kHz type)

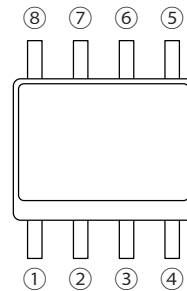
In addition to the 65 kHz type, a 100 kHz type is also available. The high frequency has made it possible to reduce the size of the power supply transformer.



Product Line-up

Model	65kHz	FA8A80N	FA8A81N	FA8A90N	FA8A91N
	100kHz	FA8A84N	FA8A85N	FA8A94N	FA8A95N
Overload protection (OLP)	Auto recovery	Latch	Auto recovery	Latch	
Delay time	200ms	200ms	200ms	200ms	200ms
Line correction	Built-in	Built-in	Built-in	Built-in	Built-in
Detection level	1 level	1 level	1 level	1 level	1 level
X-Cap discharge function	None		Built-in		
Frequency reduction function	Selectable (3 patterns)				
Burst operation point adjustment	Linearly adjustable				
Power-off mode	Built-in				
DSS (Dynamic self supply)	Built-in				
Overvoltage protection	25.5V (latch)				
Overheating protection	140°C (latch)				
Start up circuit	650V				

Pin assignment



No.	Symbol	Function
①	LAT	• External latch signal input • Switching frequency reduction setting • Switching stop FB voltage setting
②	FB	• Feedback control signal input
③	CS	• Current sense input • Overload detection, overcurrent limit • Overload protection line compensation setting
④	GND	• Ground
⑤	OUT	• Output
⑥	VCC	• Power supply pin • Under voltage lock out • Overvoltage protection
⑦	(NC)	
⑧	VH	• High-voltage input • AC input filter capacity (X-Cap) discharge*1

*1: Excluding FA8A80/81/84/85

⚠ Safety Precautions

- * Before using this product, read the "Instruction Manual" and "Specifications" carefully, and consult with the retailer from which you purchased this product as necessary to use this product correctly.
- * The product must be handled by a technician with the appropriate skills.

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