

### GENERAL DESCRIPTION

The PT2206 is a high performance AC/DC power supply regulator which integrates a 730V power switch. The PT2206 operates in quasi-resonant mode at heavy load to provide high efficiency along with a number of key built-in protection features while minimizing the external component count, and lowering the total bill of material cost. The PT2206 removes the need for secondary feedback circuitry while achieving excellent line and load regulation. It also eliminates the need for loop compensation components while maintaining stability at all operating conditions. The device uses PFM technology to enable optimized transformer design in off-line applications over a wide input voltage range. Excellent EMI performance is achieved with frequency jittering function.

The ultra-low operating current at light load ensures that the PT2206 is ideal for applications targeting the newest regulatory standards for average efficiency and standby power.

The PT2206 is available in an SOP-8 and DIP8 package

### FEATURES

- Primary-side feedback eliminates opt-isolators and simplifies design
- Quasi-resonant operation for high efficiency
- Complies with CEC/EPA no-load power consumption and average efficiency regulations
- Integrate 730V power switch
- No external compensation components required
- Built-in programmable line voltage detection
- Frequency jittering for better EMI performance
- Over current protection(OCP)
- Over load protection(OLP)
- VDD over voltage protection (OVP)
- Over temperature shut down

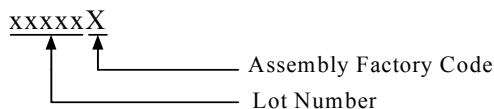
### APPLICATIONS

- DVD/STB power supply
- AC/DC adapter/chargers for cell phones, PDAs, digital still cameras
- AC/DC adapters for consumer electronics
- Auxiliary supplies for TV/PC power supply
- Home appliances, white goods and consumer electronics

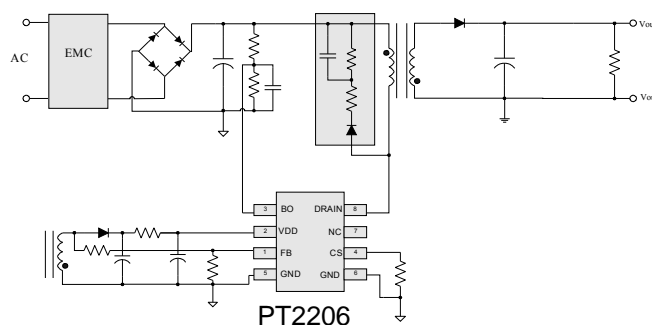
### ORDERING INFORMATION

PACKAGE	TEMPERATURE RANGE	ORDERING PART NUMBER	TRANSPORT MEDIA	MARKING
SOP8	-20°C to 85°C	PT2206ESOH	Tape and Reel	PT2206 xxxxxxX
DIP8	-20°C to 85°C	PT2206EDIH	Tube	

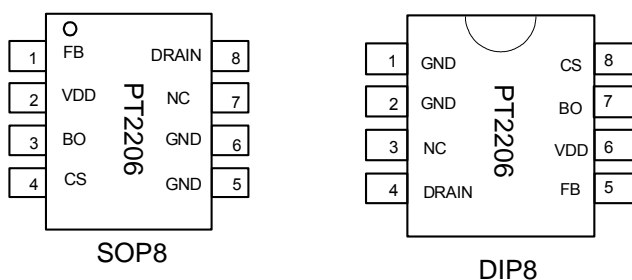
Note:



### TYPICAL APPLICATION CIRCUIT



### PIN ASSIGNMENT



### PIN DESCRIPTIONS

PIN No.		PIN NAMES	DESCRIPTION
SOP8	DIP8		
1	5	FB	Voltage Feedback
2	6	VDD	Power supply
3	7	BO	Line Voltage detection
4	8	CS	Primary winding current sensing
5	1	GND	Ground
6	2	GND	Ground
7	3	NC	No connect
8	4	DRAIN	This pin is connected with an internal power switch drain

### ABSOLUTE MAXIMUM RATINGS (note1)

SYM	PARAMETER	VALUE	UNIT
V <sub>DS(max)</sub>	DRAIN Max Voltage	-0.3~730	V
V <sub>VDD</sub>	IC Supply Voltage	<8	V
I <sub>DD_Clap</sub>	V <sub>DD</sub> DC Clamp Current	<20	mA
V <sub>FB</sub>	FB Pin Voltage Range	-0.3~7	V
V <sub>CS</sub>	CS Pin Voltage Range	-0.3~31	V
T <sub>A</sub>	Operating Temp. Range	-20 to 85	°C
T <sub>STG</sub>	Storage Temp. Range	-40 to 150	°C
R <sub>θJA</sub>	SOP8	155	°C/W
HBM	ESD Capability, HBM (note2)	>2000	V