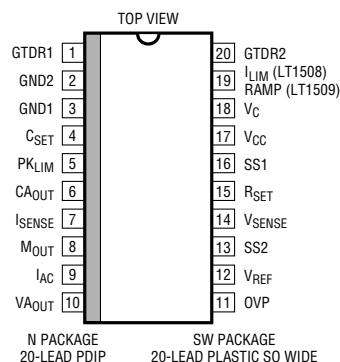


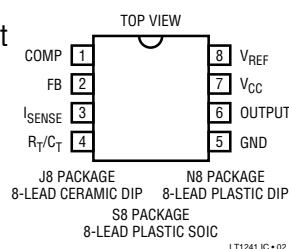
## LT1508/LT1509 Combined Power Factor Correction Controller/PWM Controller

- Universal Input Off-Line PFC and PWM Single Chip Solution
- Current Mode PWM (LT<sup>®</sup>1509)
- Voltage Mode PWM (LT1508)
- Internally Synchronized Operation Up to 300kHz
- 99% Power Factor Over 20:1 Load Current Range
- Instantaneous Overvoltage Protection
- PWM Soft Start After PFC Output Reaches Threshold Voltage
- 20-Lead PDIP and Wide SO Packages



## LT1241–LT1246 Series Key Features

- Low Start-Up Current (<250μA)
- 50ns Current Sense Delay
- Current Mode Operation to 1MHz
- Current Sense Leading Edge Blanking
- Pin Compatible with UC1842/UC3842 Series
- No Cross-Conduction Current
- 1A Totem Pole Output
- Trimmed Oscillator Frequency and Sink Current
- Active Pull-Down on Reference and Output During Undervoltage Lockout
- High Level Output Clamp (18V)
- Industrial Temperature Range Available (–40°C to 85°C)

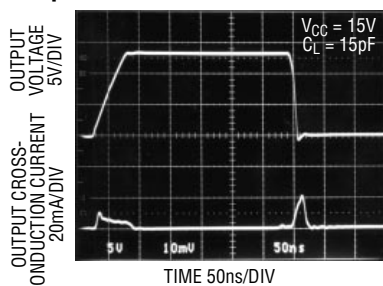


## LTC High Speed PWM Controller Family

PART	START-UP THRESHOLD (TYP)	OPERATING V <sub>CC</sub> (TYP)	MAX DUTY CYCLE	MAX SWITCH FREQ. *	BLANKING TIME (TYP)	SUPPLY CURRENT (mA) (MAX)
LT1241	9.6V	7.6V	50%	500kHz	100ns	10
LT1242	16V	10V	100%	500kHz	100ns	10
LT1243	8.4V	7.6V	100%	500kHz	100ns	10
LT1244	16V	10V	50%	500kHz	100ns	10
LT1245	8.4V	7.6V	50%	500kHz	100ns	10
LT1246	16V	10V	100%	1MHz	70ns	20
LT1247	8.4V	7.6V	100%	1MHz	70ns	20

\*Recommended Maximum Determined by Rise/Fall Times at 1000pF Loads

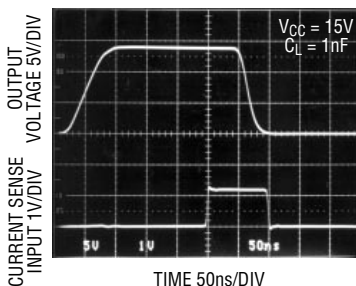
### LT1241–LT1245 Output Cross-Conduction Current



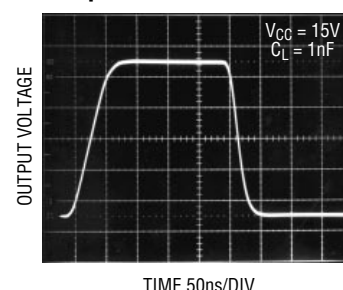
**Low Output Cross-Conduction** means LOWER SUPPLY CURRENT draw at higher switching frequencies. Switching at higher than 200kHz is now practical and more efficient.

**Short Current Sense Delay** means faster reaction to output overload conditions. Magnetics and passive components do not need to be oversized.

### LT1241–LT1245 Current Sense Delay



### LT1241–LT1245 Output Rise and Fall Time



**Fast Output Rise and Fall Times** with clean edges give better high frequency switching performance. FET switches can be turned ON and OFF efficiently and quickly.

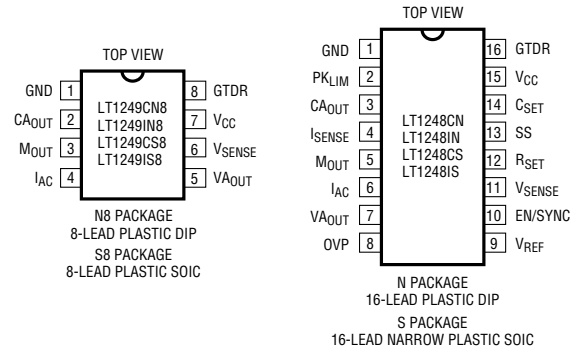
## LT1248/LT1249 Power Factor Controllers

### Features

- High Power Factor Over Wide Load Range with Line Current Averaging
- International Operation Without Switches
- Instantaneous Overvoltage Protection
- Minimal Line Switching Noise
- Typical 250 $\mu$ A Start-Up Supply Current
- Rejects Line Switching Noise
- Synchronization Capability
- Low Quiescent Current: 9mA
- Fast 1.5A Peak Current Gate Driver
- 8-Lead Surface Mount Package: LT1249

### Applications

- Universal Power Factor Corrected Power Supplies
- Preregulators



## LT1105/LT1103 Simplified Off-Line Switcher

APPLICATION	LT1105	LT1103 (INTERNAL SENSE RESISTOR)
Universal Off-Line	10W to Over 100W	10W to 50W
Battery Charger, Isolated Off-Line	OK	OK
Telecom, -48V Input Isolated	OK	OK
Low Voltage Isolated DC/DC ( $\leq 24$ V)	Requires External MOSFET	Needs No MOSFET
High Voltage Isolated DC/DC	OK	OK

### LT1103 Minimum Parts Count Isolated Off-Line Converter No Opto-Isolators!

