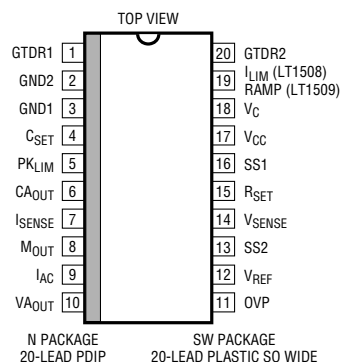


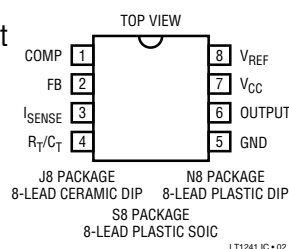
LT1508/LT1509 Combined Power Factor Correction Controller/PWM Controller

- Universal Input Off-Line PFC and PWM Single Chip Solution
- Current Mode PWM (LT[®]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)

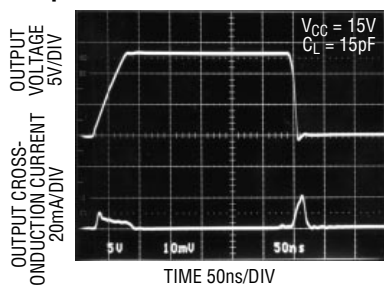


LTC High Speed PWM Controller Family

PART	START-UP THRESHOLD (TYP)	OPERATING V _{CC} (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

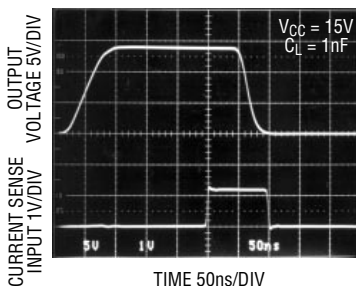
LT1241–LT1245 Output Cross-Conduction Current



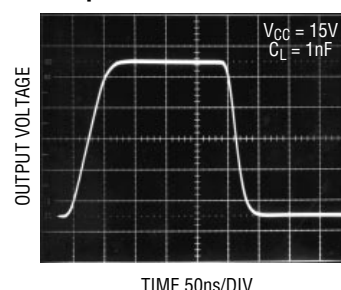
Low Output Cross-Conduction means LOWER SUPPLY CURRENT draw at higher switching frequencies. Switching at higher than 200kHz is now practical and more efficient.

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.

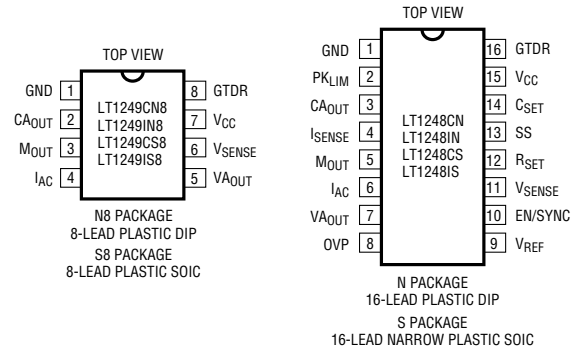
LT1248/LT1249 Power Factor Controllers

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 μ 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 ($\leq 24V$)	Requires External MOSFET	Needs No MOSFET
High Voltage Isolated DC/DC	OK	OK

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

