

LT1308 March 1999

The specifications for the LT<sup>®</sup>1308 have been revised as shown in **bold** type below. For complete specifications, typical performance characteristics and applications information, please see the LT1308 data sheet.

ABSOLUTE MAXIMUM RATINGS

Operating Temperature Range	
Commercial	20°C to 70°C
Extended Commercial (Note 1)	– 40°C to 85°C
Industrial (Note 2)	– 40°C to 85°C

## **ELECTRICAL CHARACTERISTICS**

Commercial Grade 0°C to 70°C.  $V_{IN}$  = 1.1V,  $V_{\overline{SHDN}}$  =  $V_{IN}$ ,  $T_A$  = 25°C unless otherwise noted.

SYMBOL	PARAMETER	CONDITIONS		MIN	ТҮР	MAX	UNITS
I <sub>B</sub>	FB Pin Bias Current (Note 3)	V <sub>FB</sub> = V <sub>REF</sub>	•		27	80	nA
	Switch Current Limit (Note 4)	DC = 40%	•	2.0	2.5		A
		DC = 80%		1.6	2		A
	LBI Input Bias Current (Note 5)	V <sub>LBI</sub> = 150mV	•		5	30	nA
	Reverse Battery Current	(Note <b>6</b> )			750		mA
	Maximum Duty Cycle		•	80	88	98	%

Industrial Grade – 40°C to 85°C.  $V_{IN}$  = 1.2V,  $V_{\overline{SHDN}}$  =  $V_{IN}$ ,  $T_A$  = 25°C unless otherwise noted.

SYMBOL	PARAMETER CONDITIONS			MIN	TYP	MAX	UNITS
I <sub>B</sub>	FB Pin Bias Current (Note 3)	V <sub>FB</sub> = V <sub>REF</sub>	•		27	80	nA
	Switch Current Limit (Note 4)	DC = 40%	•	2.0	2.5		A
		DC = 80%		1.6	2		A
	LBI Input Bias Current (Note 5)	V <sub>LBI</sub> = 150mV	•		5	30	nA
	Maximum Duty Cycle		•	80	88	98	%

The  $\bullet$  denotes specifications which apply over the full operating temperature range.

Note 1: C grade device specifications are guaranteed over the 0°C to 70°C temperature range (some parameters are also guaranteed to -20°C as denoted on the data sheet). In addition, C grade device specifications are assured over the -40°C to 85°C temperature range by design or correlation, but are not production tested.

Note 2: I grade specifications are guaranteed over the  $-40^\circ\text{C}$  to  $85^\circ\text{C}$  temperature range.

Note 3: Bias current flows in to FB pin.

**Note 4:** Switch current limit guaranteed by design and/or correlation to static test. Duty cycle affects current limit due to ramp generator (see Block Diagram).

Note 5: Bias current flows out of LBI pin.

Note 6: The LT1308 will withstand continuous application of 1.6V applied to GND pin while  $V_{\mbox{\rm IN}}$  and SW are grounded.

For further information regarding this specification notice contact: Linear Technology ( 1630 McCarthy Blvc Milpites, California

Linear Technology Corporation 1630 McCarthy Blvd. Milpitas, California 95035-7417 Attn: Product Marketing Manager Phone: (408) 432-1900