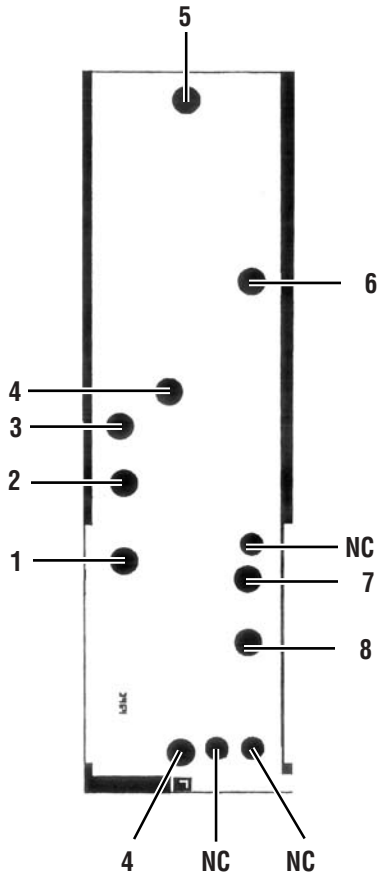
LT3464

Micropower Boost Converter with Schottky and Output Disconnect in ThinSOT™



83 × 23 mils

DIE CROSS REFERENCE

LTC Finished Part Number	Order DICE CANDIDATE Part Number Below
LT3464 LT3464	LT3464 DWF LT3464 DICE

PAD FUNCTION

1. CTRL
2. FB
3. OUT
4. GND
5. CAP
6. SW
7. V_{IN}
8. SHDN

12mils thick,
backside (substrate) is an alloyed
gold layer. Connect backside to V^-.

ABSOLUTE MAXIMUM RATINGS

(Note 1)

V_{IN}, $\overline{SHDN}$, CTRL Voltage 10V
OUT, CAP Voltage 36V
SW Voltage 36V
FB Voltage 6V

DICE ELECTRICAL TEST LIMITS

T_A = 25°C. V_{IN} = 3.6V, unless otherwise noted.

PARAMETER	CONDITIONS	MIN	MAX	UNITS
Minimum Input Voltage			2.3	V
Quiescent Current	Not Switching $V_{\overline{SHDN}}$ = 0.2V		36 0.5	µA µA
FB Comparator Trip Voltage	V_{FB} Falling, V_{CTRL} = 3.6V	1.215	1.275	V
FB Pin Bias Current	V_{FB} = 1.25V, V_{CTRL} = 3.6V		30	nA
FB Voltage Line Regulation	2.3V < V_{IN} < 10V		0.1	%/V
Switch Leakage Current	V_{SW} = 36V		1	µA
Switch Current Limit		85	140	mA
Schottky Reverse Leakage	V_{CAP-SW} = 36V		10	µA
PNP Disconnect Q Current	I_{OUT} = 0, V_{CAP} = 36V (Note 3)		5	µA
PNP Disconnect Leakage	$\overline{SHDN}$ = 0.2, V_{CAP} = 10V, V_{OUT} = 0V		5	µA
PNP Disconnect Current Limit	V_{CAP} = 10V, V_{OUT} = 0V	25	75	mA
SHDN Pin Current	$V_{\overline{SHDN}}$ = 3.6V		10	µA
SHDN Input Voltage High		2.3		V
$\overline{SHDN}$ Input Voltage Low			0.2	V
$\overline{CTRL}$ Pin Bias Current	V_{CTRL} = 0.5V, V_{FB} = 1V		80	nA
$\overline{CTRL}$ to FB Offset	V_{CTRL} = 0.5V (Note 3)		7	mV

Note 1: Absolute Maximum Ratings are those values beyond which the life of a device may be impaired.

Note 2: Current consumed by Disconnect PNP when there is no load on the OUT pin.

Note 3: This figure is computed according to ((V_{FB} falling + V_{FB} rising)/2) –$V_{CONTROL}$.

Wafer level testing is performed per the indicated specifications for dice. Considerable differences in performance can often be observed for dice versus packaged units due to the influences of packaging and assembly on certain devices and/or parameters. Please consult factory for more information on dice performance and lot qualifications via lot sampling test procedures.

Dice data sheet subject to change. Please consult factory for current revision in production.

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Linear Technology Corporation
1630 McCarthy Blvd., Milpitas, CA 95035-7417
(408) 432-1900 • FAX: (408) 434-0507 • www.linear.com

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