

IL3480-XX

100mA, Quasi Low-Dropout Voltage Regulator

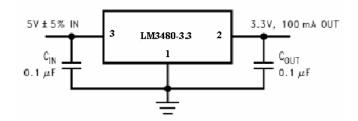
FEATURES:

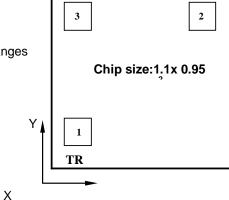
- u 3.3, 5V versions available
- u 30V maximum input for operation
- u 1.2V guaranteed maximum dropout over full load and temperature ranges
- u 100 mA guaranteed minimum load current

APPLICATION:

- u Tiny alternative to 78LXX series and similar devices
- **u** Low-Dropout Voltage Regulator
- u Post regulator for switching DC/DC converter
- u Bias supply for analog circuits

TYPICAL APPLICATION CIRCUIT





PAD LOCATION

Pad No.	Pad Name	Х	Υ
1	GND	92	107
2	Output	899	747
3	Input	92	747

Note:

- •Co-ordinates (bottom left co-ordinates comer), µm
- •Padsize: 96x96 μm²

PHISICAL CHARACTERISTICS

Wafer Diameter..... 100 ± 0.5 mm; Wafer thickness $280 \pm 20 \mu m$;

Scribe width80 µm; Metallization: Top... Al

Bottom... without metallization

ABSOLUTE MAXIMUM RATINGS

Input Voltage 35V Junction Temperature +150°C

ELECTRICAL CHARACTERISTICS IL3480-3.3, IL3480-5.0

Typicals and limits appearing in normal type apply for $TA = TJ = 25^{\circ}C$. Limits appearing in boldface type apply over the entire junction temperature range for operation, -10 to +70°C. (Notes 1, 2)

Nominal Output Voltage (VNOM)			3.3V		5.0V			Linita	
Parameter	Symbol	Conditions	Min	Тур	Max	Min	Тур	Max	Units
Output Voltage	Vout	Vin=Vnom+1.5V; 1mA≤lout≤100mA	3.17 3.14	3.3	3.43 3.46	4.8 4.75	5.0	5.2 5.25	V
Line Regulation	ΔVout	Vnom+1.5V ≤Vin≤30V; lout =1mA			25			25	mV
Load Regulation	ΔVout	Vin=Vnom+1.5V; 1mA≤lout≤100mA			50			50	mV
Ground Pin Current	I _{GND}	Vin=30V No Load		3	4		3	4	mA
Ground Pin Current Change	ΔI_GND	Vnom+1.5V ≤Vin≤20V, lout =40mA; Vin=Vnom+5V,			1.4			1.4	mA
		1mA≤lout≤40mA			0.5			0.5	mA
Dropout Voltage	Vin- Vout	lout =10mA;			0.9 1.0			0.9 1.0	V
		lout =100mA			1.1 1.2			1.1 1.2	V

Note 1: A typical is the center of characterization data taken with TA = TJ = 25°C. Typicals are not guaranteed.

Note 2: All limits are guaranteed. All electrical characteristics having room-temperature limits are tested during production with TA = TJ = 25°C. All hot and cold limits are guaranteed by correlating the electrical characteristics to process and temperature variations and applying statistical process control.