100mA, Quasi Low-Dropout Voltage Regulator

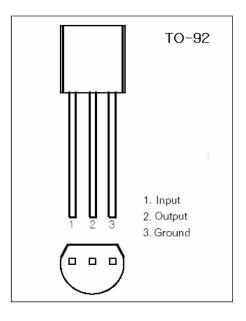
IL3480

Features:

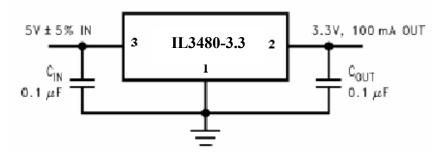
- 3.3, 5V versions available
- 30V maximum input for operation
- 1.2V guaranteed maximum dropout over full load and temperature ranges
- 100 mA guaranteed minimum load current

Application:

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



Typical Application Circuit



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			I	
Parameter	Symbol	Conditions	Min	Тур	Max	Min	Тур	Max	Units
Output Voltage	Vout	Vin=Vnom+1.5V; 1mA≤Iout≤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; Iout =1mA			25			25	mV
Load Regulation	ΔVout	Vin=Vnom+1.5V; 1mA≤Iout≤100mA			40			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, Iout =40mA; Vin=Vnom+5V,			1.4			1.4	mA
		1mA≤Iout≤40mA			0.5			0.5	mA
Dropout Voltage	Vin- Vout	Iout =10mA;			0.9 1.0 1.1			0.9 1.0 1.1	V
	Iout =100mA			1.2			1.2		

Note 1: A typical is the center of characterization data taken with $TA = TJ = 25^{\circ}C$. Typicals are not guaranteed. Note 2: All limits are guaranteed. All electrical characteristics having room-temperature limits are tested during production with $TA = TJ = 25^{\circ}C$. All hot and cold limits

are guaranteed by correlating the electrical characteristics to process and temperature variations and applying statistical process control.



• TO-92

