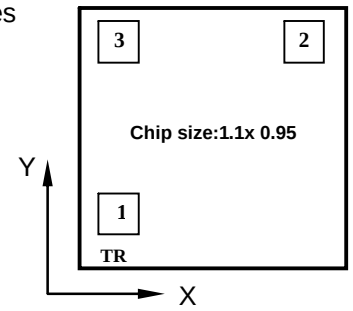
100mA, Quasi Low-Dropout Voltage Regulator

FEATURES:

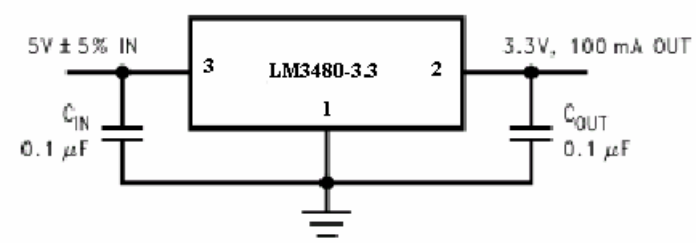
- **u** 3.3, 5V versions available
- **u** 30V maximum input for operation
- **u** 1.2V guaranteed maximum dropout over full load and temperature ranges
- **u** 100 mA guaranteed minimum load current

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	X	Y
1	GND	92	107
2	Output	899	747
3	Input	92	747

Note:
•Co-ordinates (bottom left co-ordinates comer), μm
•Padsize: 96x96 μm^2

PHISICAL CHARACTERISTICS

Wafer Diameter..... 100 ± 0.5 mm;
Wafer thickness ..... 280 ± 20μm;
Scribe width .....80 μm;
Metallization: Top... Al
Bottom... without metallization

ABSOLUTE MAXIMUM RATINGS

Input Voltage	35V
Junction Temperature	+150°C

ELECTRICAL CHARACTERISTICS LM3480-3.3, LM3480-5.0

Typicals and limits appearing in normal type apply for TA = TJ = 25°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**			**Units**
Parameter	**Symbol**	**Conditions**	**Min**	**Typ**	**Max**	**Min**	**Typ**	**Max**	
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			50			50	mV
Ground Pin Current	I_{GND}	Vin=30V No Load		4	6		4	6	mA
Ground Pin Current Change	ΔI_{GND}	Vnom+1.5V ≤Vin≤20V, Iout =40mA; Vin=Vnom+5V, 1mA≤Iout≤40mA			1.4 0.5			1.4 0.5	mA mA
Dropout Voltage	Vin-Vout	Iout =10mA; Iout =100mA			0.9 1.0 1.1 1.2			0.9 1.0 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.