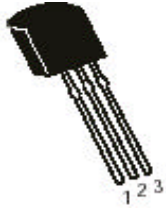


## POSITIVE VOLTAGE REGULATOR

**LM78L15**



pin 1.Output  
2.Ground  
3.Input

**TO-92  
Plastic Package**

The voltages available allow these Regulators to be used in Logic Systems, Instrumentation, Hi-Fi Audio Circuits and other Solid State Electronic Equipment

### ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Input Voltage	$V_{IN}$	35	V
Power Dissipation	$P_D$	625	mW
Operating free air, Case, or Virtual Junction Temperature Range	$T_j$	0 to 150	°C
Storage Temperature Range	$T_{stg}$	- 65 to +150	°C
Lead Temperature 1.6mm (1/16inch) from Case for 10 seconds	$T_L$	260	°C

### Recommended Operating Conditions

DESCRIPTION	SYMBOL	MIN	TYP	MAX	UNIT
Input Voltage	$V_I$	17.5		30	V
Output Current	$I_O$			100	mA
Operating Junction Temperature	$T_j$	0		125	°C

### ELECTRICAL CHARACTERISTICS

(At Specified Virtual Junction Temperature,  $V_I=23V$ ,  $I_O=40mA$ , (unless specified otherwise))

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Output Voltage	$V_O$	25°C	14.4		15.6	V
		$I_O=1mA$ to 40mA, 0°C to 125°C $V_I=17.5V$ to 30V, 0°C to 125°C	14.25		15.75	V
		$I_O=1mA$ to 70mA, 0°C to 125°C	14.25		15.75	V
Line Regulation	$R_{BGIN}$	$V_I=17.5V$ to 30V, 25°C			300	mV
		$V_I=19$ to 30V, 25°C			250	mV
Ripple Rejection	$R_R$	$V_I=18.5V$ to 28.5V, $f=120Hz$ , 0°C to 125°C	34			dB
Load Regulation	$R_{BGL}$	$I_O=1mA$ to 100mA, 25°C			150	mV
		$I_O=1mA$ to 40mA, 25°C			75	mV
Output Noise Voltage	$V_{NO}$	$f=10Hz$ to 100KHz, 25°C		82		µV
Dropout Voltage	$V_{DIF (min)}$	25°C		1.7		V
Quiescent Current	$I_Q$	25°C			6.5	mA
		125°C			6.0	mA
Quiescent Current Change	$\Delta I_{QIN}$	$V_I=19V$ to 30V, 0°C to 125°C			1.5	mA
	$\Delta I_{QL}$	$I_O=1mA$ to 40mA, 0°C to 125°C			0.1	mA

LM78L15Rev140406E

### **Disclaimer**

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