

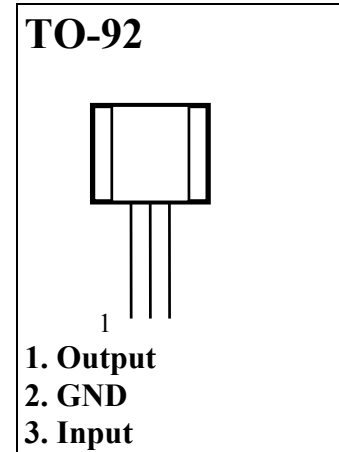
78L24 A • THREE-TERMINAL POSITIVE VOLTAGE REGULATOR IC

FEATURES:

- OUTPUT CURRENT IN EXCESS OF 100mA;
- NO EXTERNAL COMPONENTS REQUIRED;
- INTERNAL SHORT CIRCUIT CURRENT LIMITING;
- INTERNAL THERMAL OVERLOAD PROTECTION;
- OUTPUT TRIMMED TO $\pm 5\%$ TOLERANCE;

ABSOLUTE MAXIMUM RATINGS (Ta= 25° C)

Characteristic	Symbol	Norm	Unit
Input Voltage	V _{in}	V	40
Junction Temperature	T _j	°C	150



ELECTRICAL CHARACTERISTICS

(V_{in}=33V, I_o=40mA, C_i=0.33mkF, C_o=0.1mkF, T_j=0+125°C, unless otherwise noted.)

Characteristic	Symbol	Norm			Unit
		Min	TYP	Max	
Output Voltage(T _j =25°C)	V _o	23,0		25,0	V
Output Voltage 1.0mA ≤ I _o ≤ 40mA, 27 V ≤ V _{in} ≤ 38 V 1.0mA ≤ I _o ≤ 70mA, V _{in} = 33 V	V _o	22,8 22,8		25,2 25,2	V
Line Regulation (T _j =+25°C, I _o =40mA) 28 V ≤ V _{in} ≤ 38 V 27 V ≤ V _{in} ≤ 38 V	ΔV _v			300 350	mV
Load Regulation(T _j =+25°C) 1.0mA ≤ I _o ≤ 0.1A 1.0mA ≤ I _o ≤ 40mA	ΔV _i			200 100	mV
Quiescent Current T _j =+25°C	I _b			6.5	mA
T _j =+125°C	I _b			6.0	mA
Quiescent Current Change 28 V ≤ V _{in} ≤ 38 V 1.0mA ≤ I _o ≤ 40m A	ΔI _b			1.5 0.1	mA
Dropout Voltage (I _o =40mA, T _j =+25°C)	V _i -V _o		1,7		V