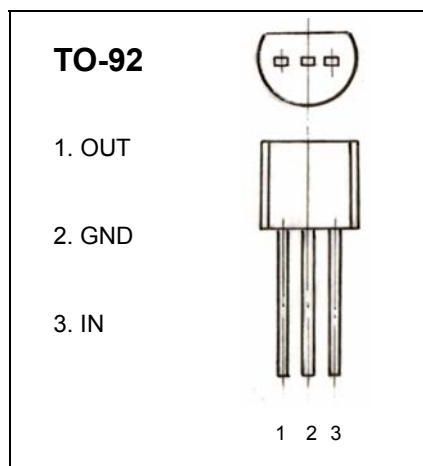


# 深圳市晶泰源电子有限公司

**WL 78L08** Three-terminal positive voltage regulator

## FEATURES

Maximum Output current  
 $I_{OM}$ : 0.1 A  
 Output voltage  
 $V_o$ : 8 V  
 Continuous total dissipation  
 $P_D$ : 0.625W



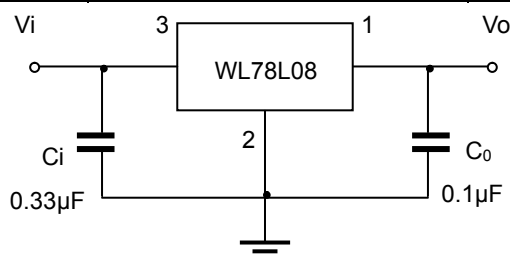
## ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Units
Input Voltage	$V_I$	30	V
Operating Junction Temperature Range	$T_{OPR}$	0~+125	°C
Storage Temperature Range	$T_{STG}$	-55~+150	°C

## ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ( $V_i=14V$ , $I_o=40mA$ , $C_i=0.33\mu F$ , $C_o=0.1\mu F$ , unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Output voltage	$V_o$	$25^\circ C$	7.7	8.0	8.3	V
		$10.5V \leq V_i \leq 23V$ , $I_o=1mA \sim 40mA$	7.6	8.0	8.4	V
		$0-125^\circ C$ $I_o=1mA \sim 70mA$	7.6	8.0	8.4	V
Load Regulation	$\Delta V_o$	$I_o=1mA \sim 100mA$ $25^\circ C$		18	80	mV
		$I_o=1mA \sim 40mA$ $25^\circ C$		10	40	mV
Line regulation	$\Delta V_o$	$10.5V \leq V_i \leq 23V$ $25^\circ C$		42	175	mV
		$11V \leq V_i \leq 23V$ $25^\circ C$		36	125	mV
Quiescent Current	$I_q$	$25^\circ C$		4	6	mA
Quiescent Current Change	$\Delta I_q$	$11V \leq V_i \leq 23V$ $0-125^\circ C$			1.5	mA
	$\Delta I_q$	$1mA \leq I_o \leq 40mA$ $0-125^\circ C$			0.1	mA
Output Noise Voltage	$V_N$	$10Hz \leq f \leq 100KHz$ $25^\circ C$		54		uV
Ripple Rejection	RR	$13V \leq V_i \leq 23V$ , $f=120Hz$ $0-125^\circ C$	37	46		dB
Dropout Voltage	$V_d$	$25^\circ C$		1.7		V

## TYPICAL APPLICATION



Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.