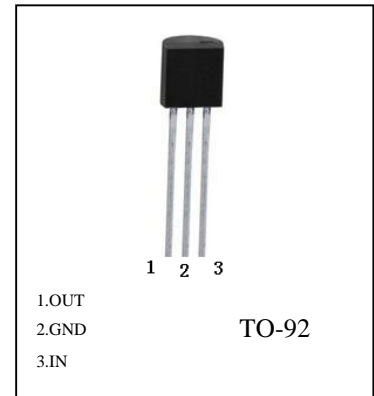


FEATURES

Maximum Output current I_O : 0.1 A
 Output voltage V_O : 8 V
 Continuous total dissipation P_D : 0.625 W ($T_a=25\text{ }^\circ\text{C}$)

78L08



ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies)

Parameter	Symbol	Value	Unit
Input Voltage	V_I	30	V
Operating Junction Temperature Range	TOPR	0-125	$^\circ\text{C}$
Storage Temperature Range	TSTG	-65-150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($V_i=10V, I_o=500mA, C_i=0.33\mu F, C_o=0.1\mu F$, unless otherwise specified)

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

78L08 Typical Characteristics

