

Three-terminal positive voltage regulator

## FEATURES

Maximum Output current  $I_O$ : 0.1 A

Output voltage  $V_O$ : 8 V

Continuous total dissipation  $P_D$ : 0.35 W ( $T_a = 25^\circ\text{C}$ )

## ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies)

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

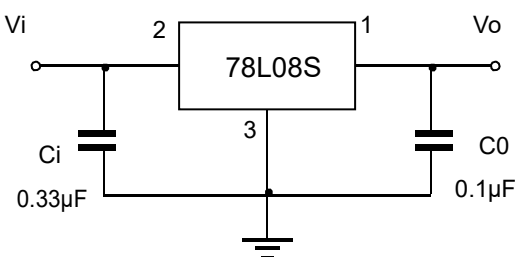


## ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ( $V_i=10\text{V}, I_o=40\text{mA}, C_i=0.33\mu\text{F}, C_o=0.1\mu\text{F}$ , unless otherwise specified)

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

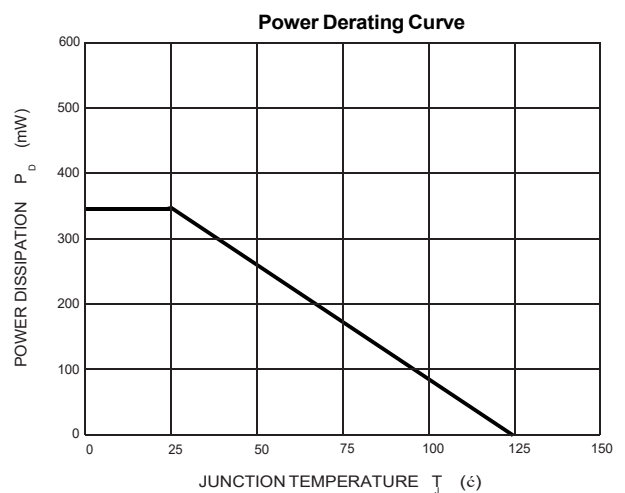
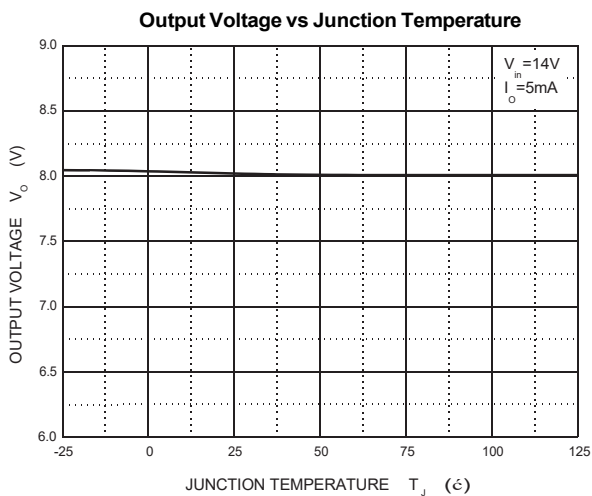
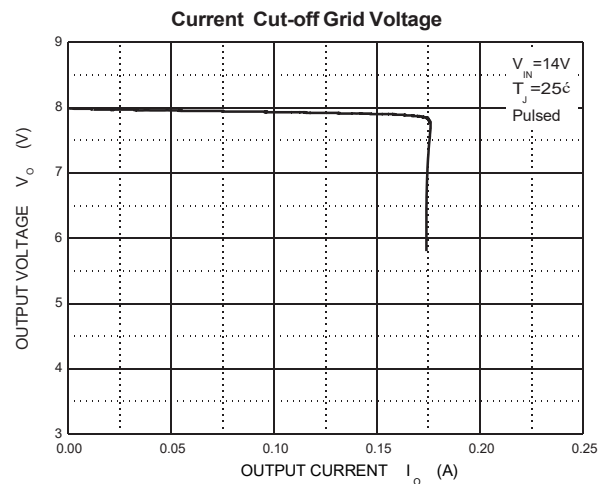
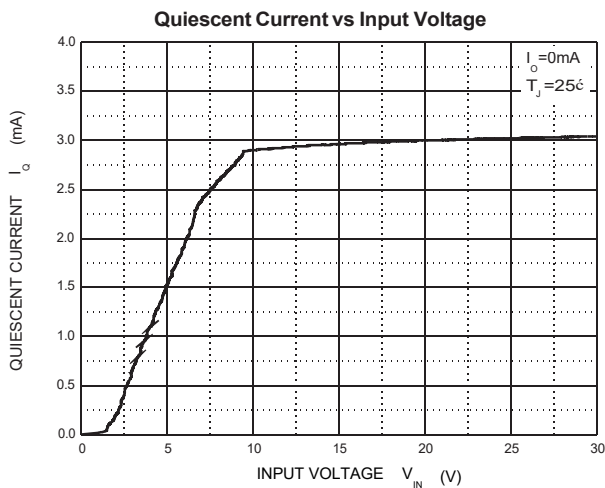
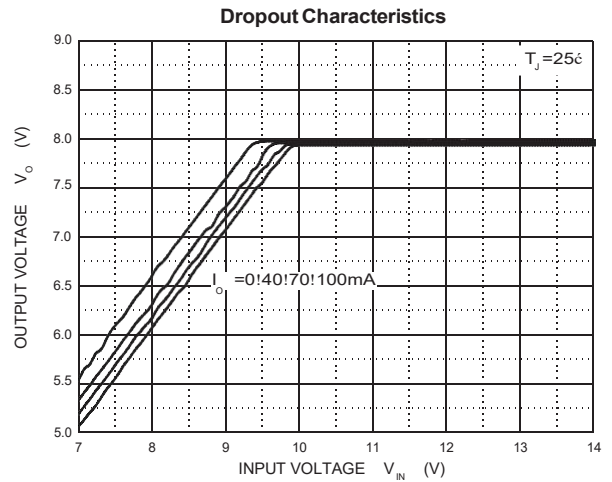
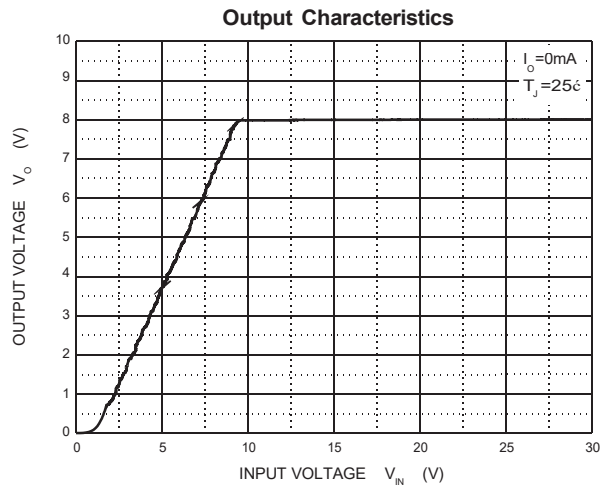
\* Pulse test.

## TYPICAL APPLICATION



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

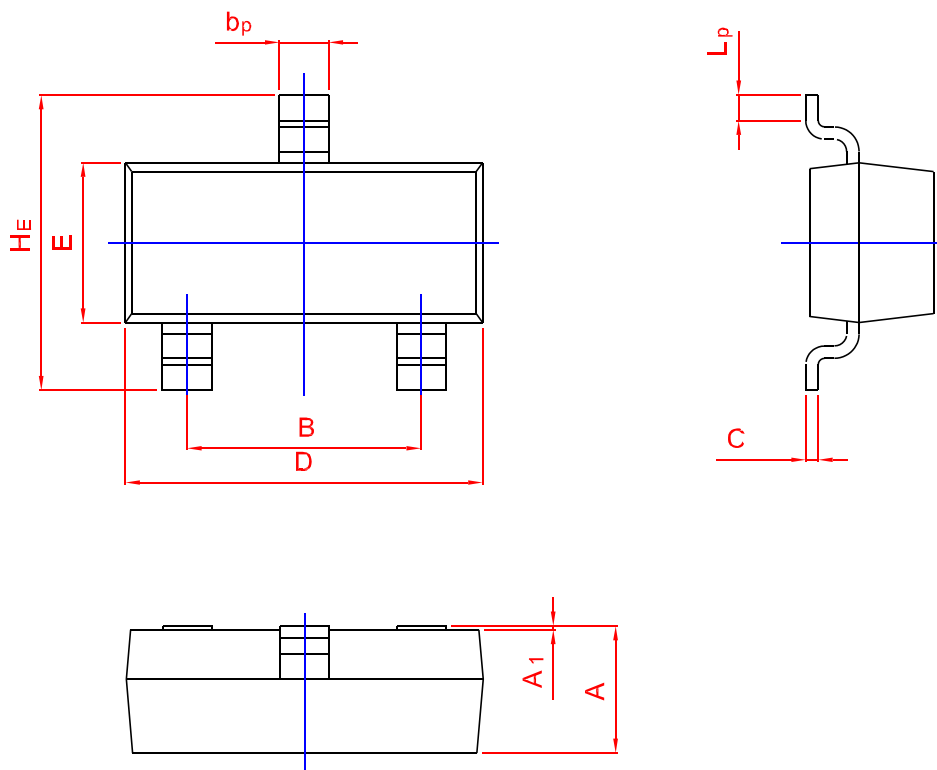
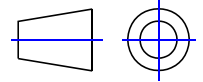
## Typical Characteristics



## PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	b <sub>p</sub>	C	D	E	H <sub>E</sub>	A <sub>1</sub>	L <sub>p</sub>
mm	1.40	2.04	0.50	0.19	3.10	1.65	3.00	0.100	0.50
	0.95	1.78	0.35	0.08	2.70	1.20	2.20	0.013	0.20

单击下面可查看定价，库存，交付和生命周期等信息

[>>SHIKUES\(时科\)](#)