

SOT-23 Plastic-Encapsulate Voltage Regulators

79L08 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}	0-150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65-150	$^\circ\text{C}$

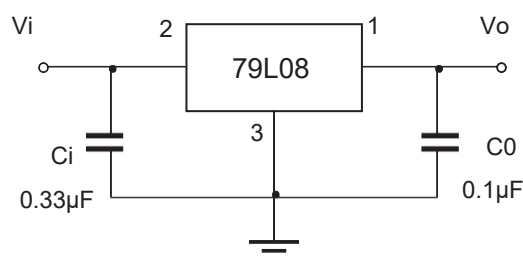


ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i=-14\text{V}$, $I_o=40\text{mA}$, $C_i=0.33\mu\text{F}$, $C_o=0.1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Output voltage	V_O	25°C	-7.7	-8.0	-8.3	V
		$-10.5\text{V} \leq V_i \leq -23\text{V}$, $I_o=1\text{mA} \sim 40\text{mA}$	-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	ΔV_O	$I_o=1\text{mA} \sim 100\text{mA}$	25°C	30	100	mV
		$I_o=1\text{mA} \sim 40\text{mA}$	25°C	15	50	mV
Line regulation	ΔV_O	$-10.5\text{V} \leq V_i \leq -23\text{V}$	25°C	42	200	mV
		$-11\text{V} \leq V_i \leq -23\text{V}$	25°C	36	150	mV
Quiescent Current	I_q	25°C		4.0	6	mA
Quiescent Current Change	ΔI_q	$-11\text{V} \leq V_i \leq -23\text{V}$	$0-125^\circ\text{C}$		1.5	mA
	ΔI_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°C	54		μV
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°C		1.7		V

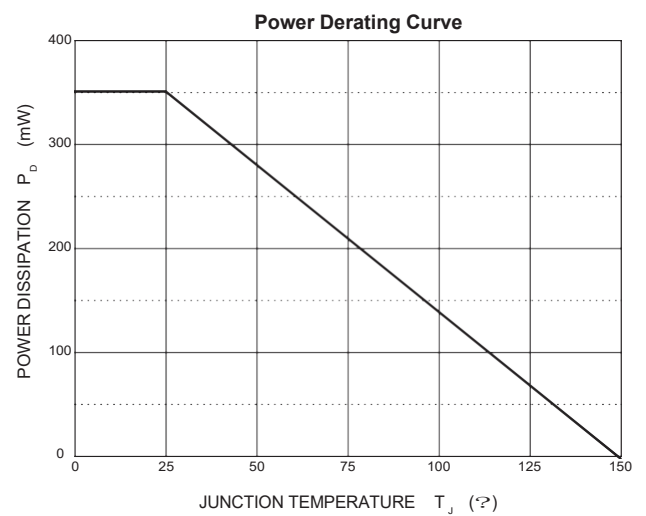
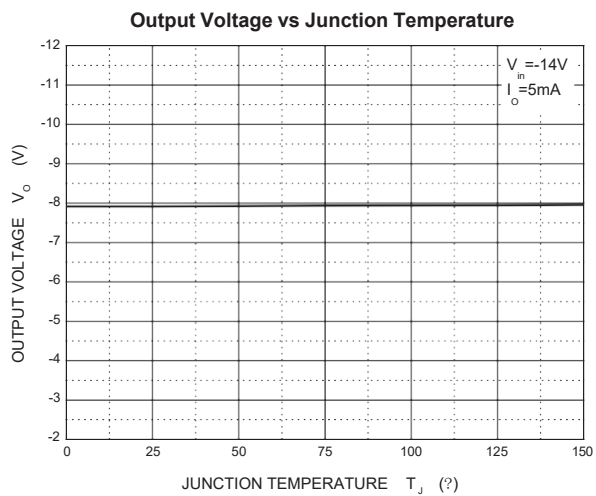
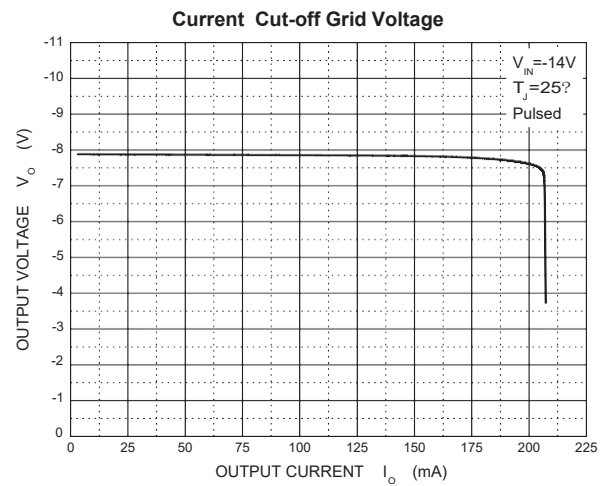
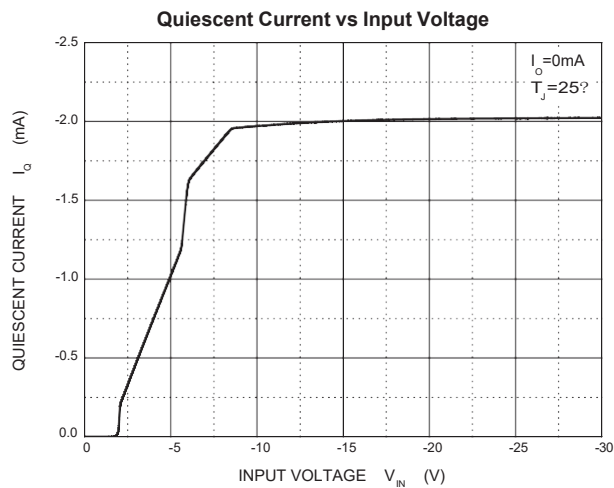
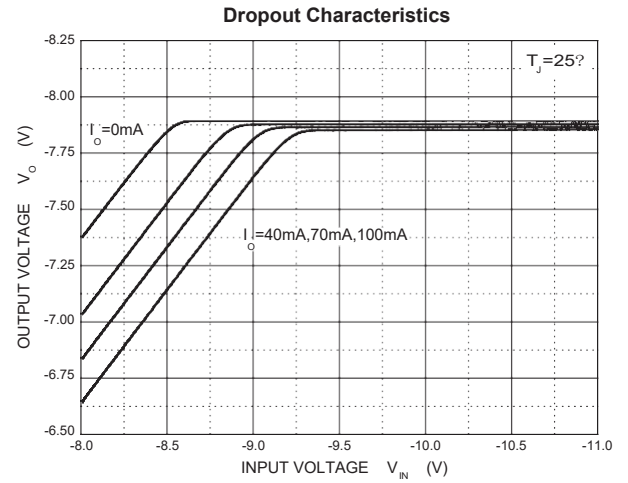
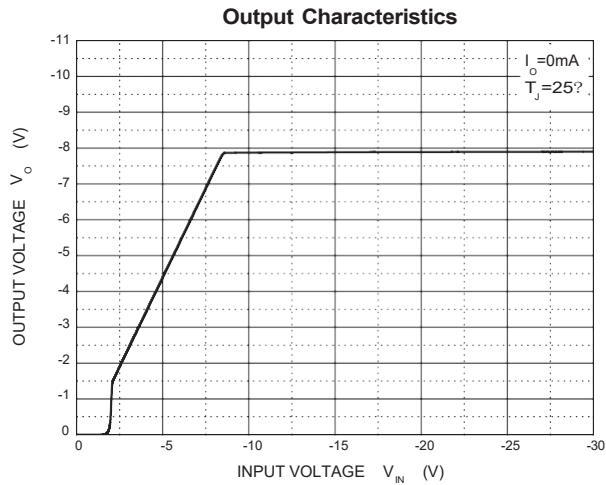
* Pulse test.

TYPICAL APPLICATION



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

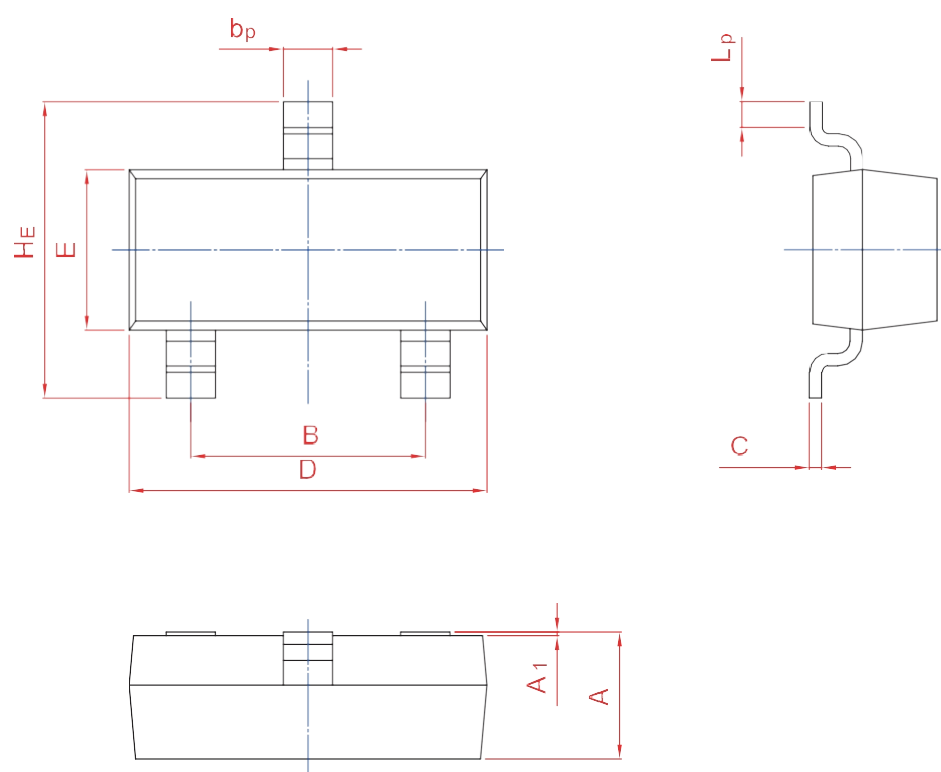
Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40 0.95	2.04 1.78	0.50 0.35	0.19 0.08	3.10 2.70	1.65 1.20	3.00 2.20	0.100 0.013	0.50 0.20