

SOT-23 Plastic-Encapsulate Voltage Regulators

79L08S 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	$^\circ\text{C}$

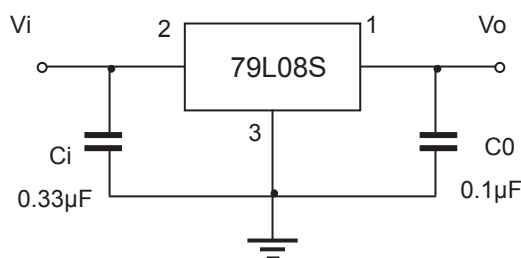


ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i=-14\text{V}, I_o=40\text{mA}, C_i=0.33\mu\text{F}, C_o=0.1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output voltage	V_o	25°C	-7.7	-8.0	-8.3	V	
		-10.5V $\leq V_i\leq$ -23V, $I_o=1\text{mA}\sim 40\text{mA}$	0-125 $^\circ\text{C}$	-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	-10.5V $\leq V_i\leq$ -23V	25°C		42	200	mV
		-11V $\leq V_i\leq$ -23V	25°C		36	150	mV
Quiescent Current	I_q		25°C		4.0	6	mA
Quiescent Current Change	ΔI_q	-11V $\leq V_i\leq$ -23V	0-125 $^\circ\text{C}$			1.5	mA
		1mA $\leq I_o\leq$ 40mA	0-125 $^\circ\text{C}$			0.1	mA
Output Noise Voltage	V_N	10Hz $\leq f\leq$ 100KHz	25°C		54		μV
Ripple Rejection	RR	-13V $\leq V_i\leq$ -23V, $f=120\text{Hz}$	0-125 $^\circ\text{C}$	37	46		dB
Dropout Voltage	V_d		25°C		1.7		V

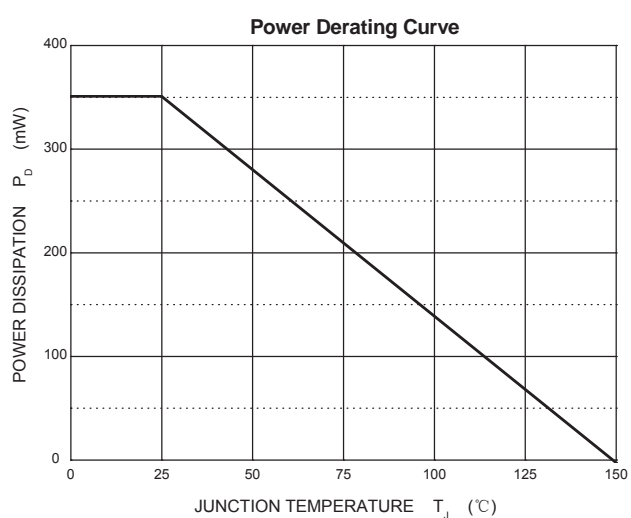
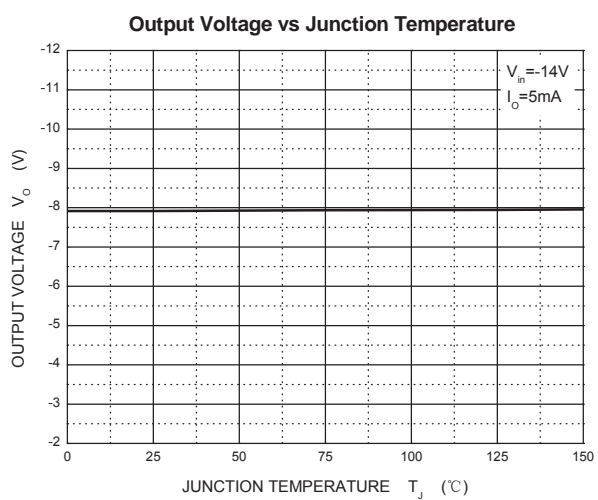
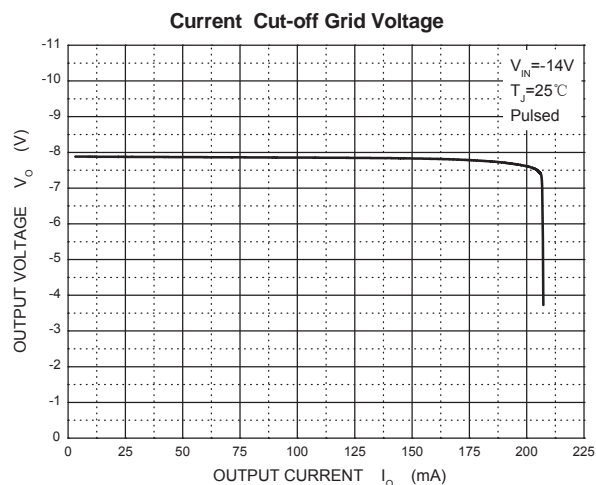
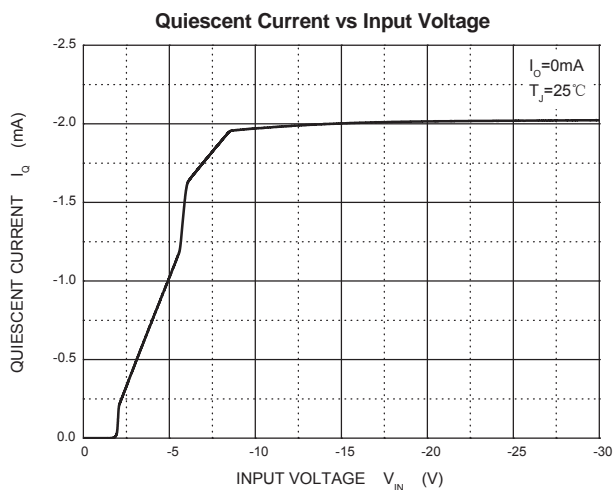
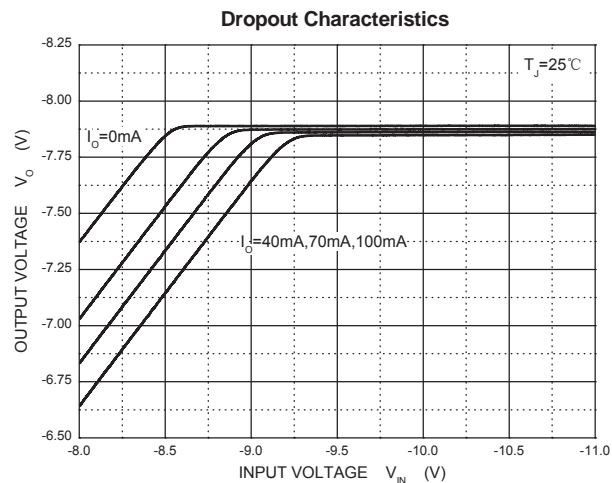
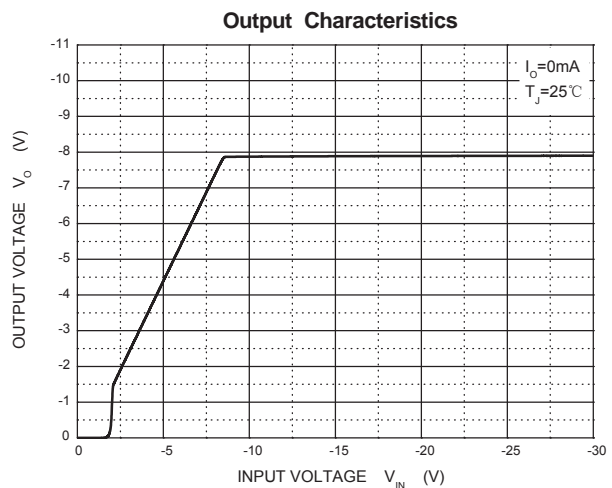
* Pulse test.

TYPICAL APPLICATION



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

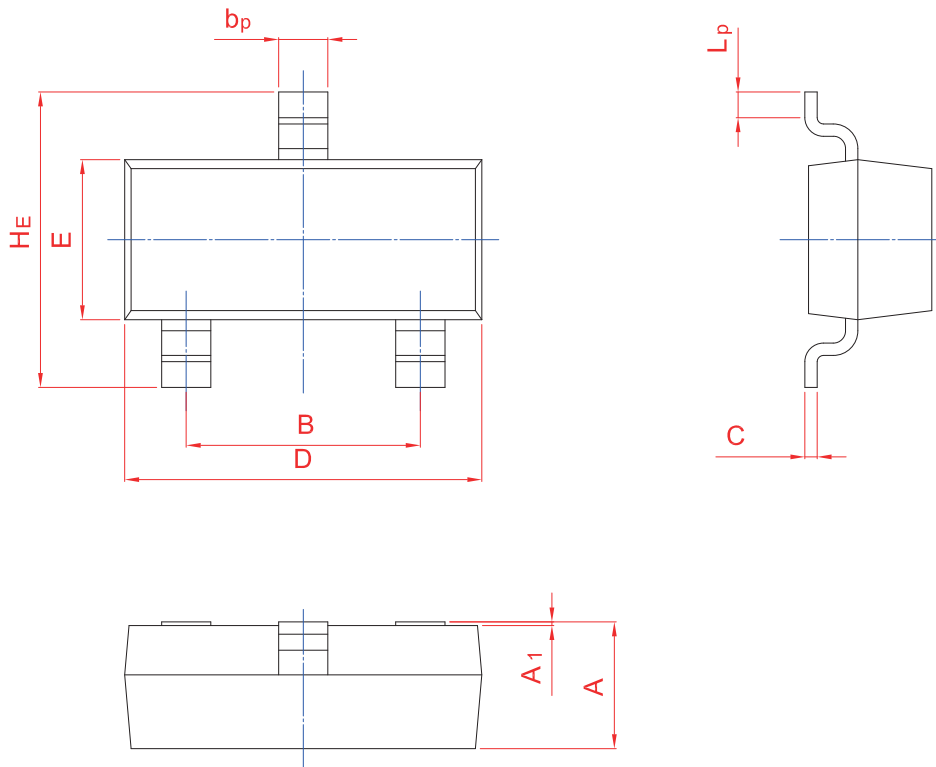
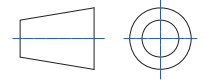
Typical Characteristics



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



UNIT	A	B	bp	C	D	E	HE	A1	Lp
mm	1.40	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