

SOT-23 Plastic-Encapsulate Voltage Regulators

79L12 Three-terminal positive voltage regulator

FEATURES

Maximum Output current I_O : 0.1 A

Output voltage V_O : -12 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	-35	V
Operating Junction Temperature Range	TOPR	0-150	$^\circ\text{C}$
Storage Temperature Range	TSTG	-65-150	$^\circ\text{C}$

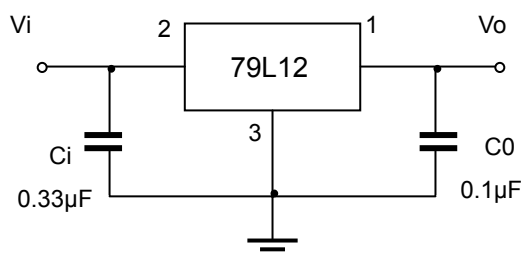


ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i=-19\text{V}, I_o=40\text{mA}, C_i=0.33\mu\text{F}, C_o=0.1\mu\text{F}$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output voltage	V_o	25°C	-11.5	-12.0	-12.5	V	
		-14V V_i -27V, $I_o=1\text{mA}\sim 40\text{mA}$	0-125 $^\circ\text{C}$	-11.4	-12.0	-12.6	V
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Load Regulation	V_o	$I_o=1\text{mA}\sim 100\text{mA}$	25°C	24	100	mV	
		$I_o=1\text{mA}\sim 40\text{mA}$	25°C	15	50	mV	
Line regulation	V_o	-14V V_i -27V	25°C	50	250	mV	
		-16V V_i -27V	25°C	40	200	mV	
Quiescent Current	I_q	25°C			6.5	mA	
Quiescent Current Change	I_q	-16V V_i -27V	0-125 $^\circ\text{C}$			1.5	mA
		1mA I_o 40mA	0-125 $^\circ\text{C}$			0.1	mA
Output Noise Voltage	V_N	10Hz f 100KHz	25°C	80		μV	
Ripple Rejection	RR	-15V V_i -25V, f=120Hz	0-125 $^\circ\text{C}$	37	42	dB	
Dropout Voltage	V_d	25°C		1.7		V	

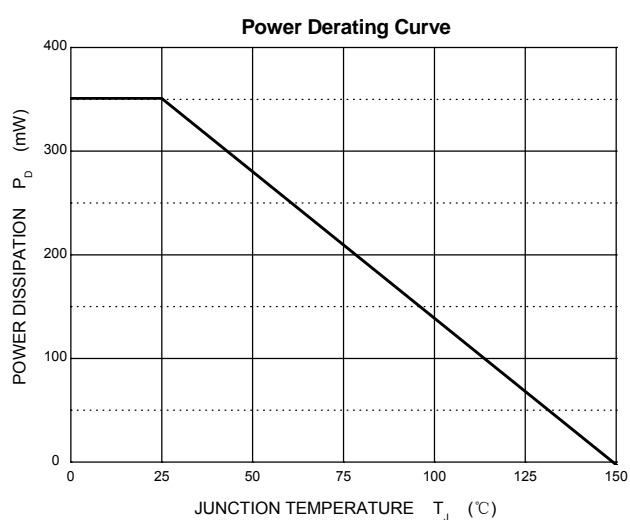
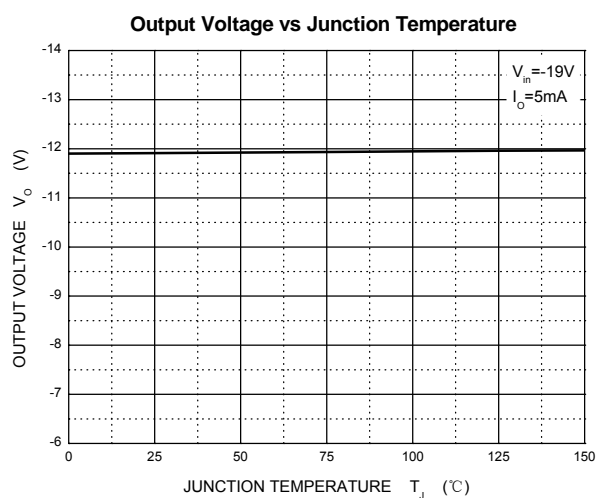
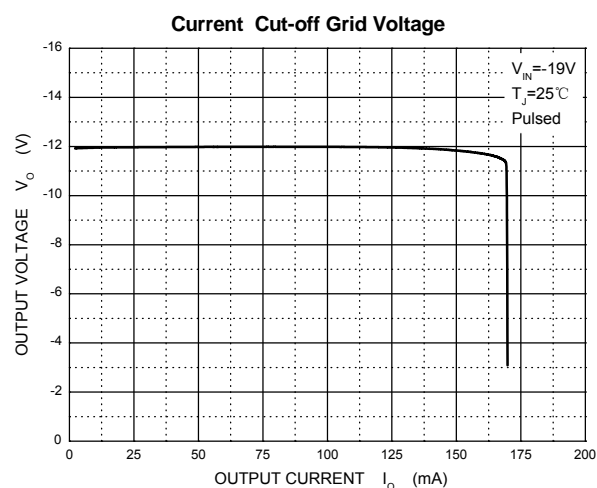
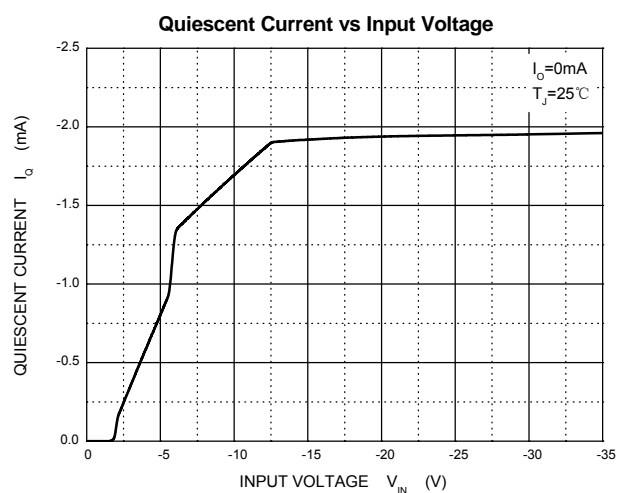
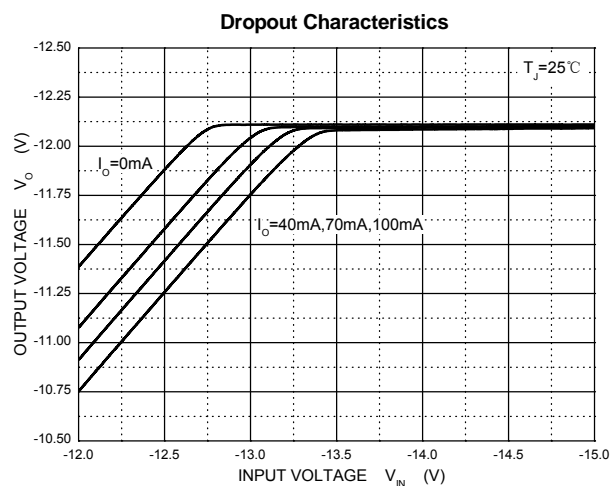
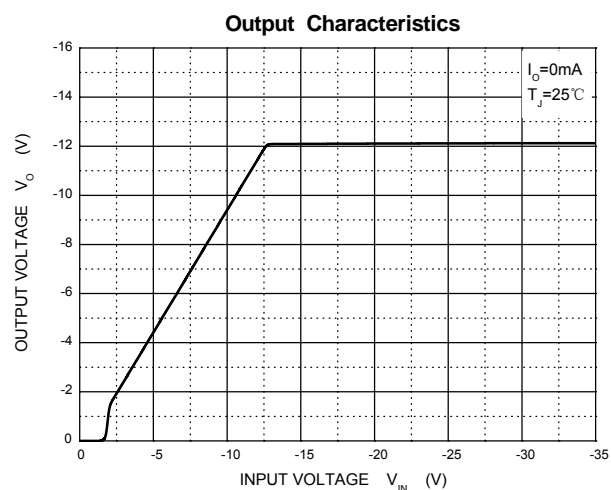
* Pulse test.

TYPICAL APPLICATION



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

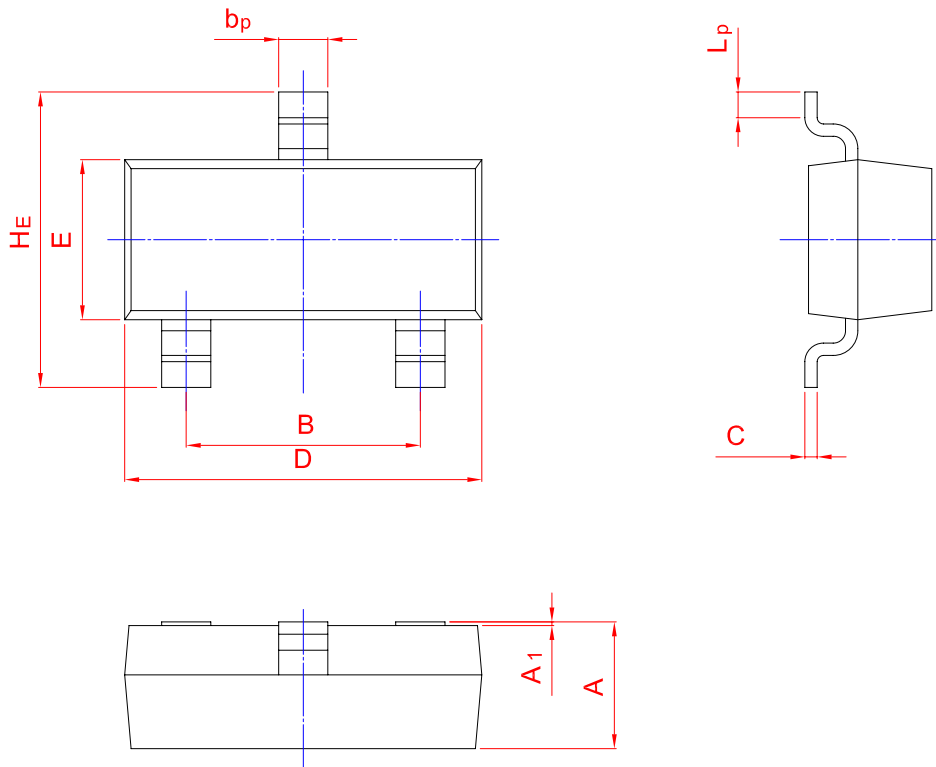
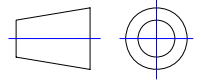
Typical Characteristics



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