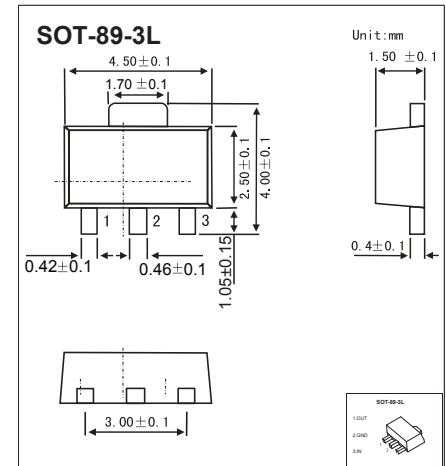## Three-terminal positive voltage regulator

FEATURES

- Maximum output current IOM: 0.1 A
- Output voltageVO: -12V
- Continuous total dissipation

    P_D: 0.625W (T_a= 25 ℃)

MECHANICAL DATA

- Case:SOT-89 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Mounting Position: Any

SOT-89-3L

ABSOLUTE MAXIMUM RATINGS

(Operating temperature range applies unless otherw ise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	-35	V
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	200	℃/W
Operating Junction Temperature Range	T_{OPR}	0~+150	℃
Storage Temperature Range	T_{STG}	-65~+150	℃

ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JINCTION
TEMPERATURE (V_i=-19V,Io=40mA,Ci=0.33 F,Co=0.1 F, unless otherwise specified)

| Parameter	Symbol	Test conditions		Min	Typ	Max	Unit
Output Voltage	Vo		25℃	-11.52	-12	-12.48	V
		-14.5V≤V_I≤-27V, Io=1mA~40mA	0-125℃	-11.4	-12	-12.6	V
		Io=1mA~70mA		-11.4	-12	-12.6	V
Load Regulation	ΔVo	Io=1mA~100mA	25℃		24	100	mV
		Io=1mA~40mA	25℃		15	50	mV
Line Regulation	ΔVo	-14.5V≤V_I≤-27V	25℃		50	250	mV
		-16V≤V_I≤-27V	25℃		40	200	mV
Quiescent Current	Iq		25℃			6.5	mA
Quiescent Current Change	ΔIq	-16V≤V_I≤-27V	0-125℃			1.5	mA
	ΔIq	1mA≤I_O≤40mA	0-125℃			0.1	mA
Output Noise Voltage	V_N	10Hz≤f≤100KHz	25℃		80		μV/Vo
Ripple Rejection	RR	-15V≤V_I≤-25V,f=120Hz	0-125℃	37	42		dB
Dropout Voltage	Vd		25℃		1.7		V

* Pulse test.

TYPICAL APPLICATION
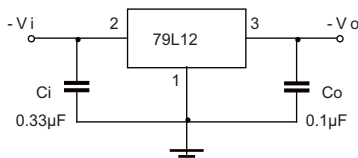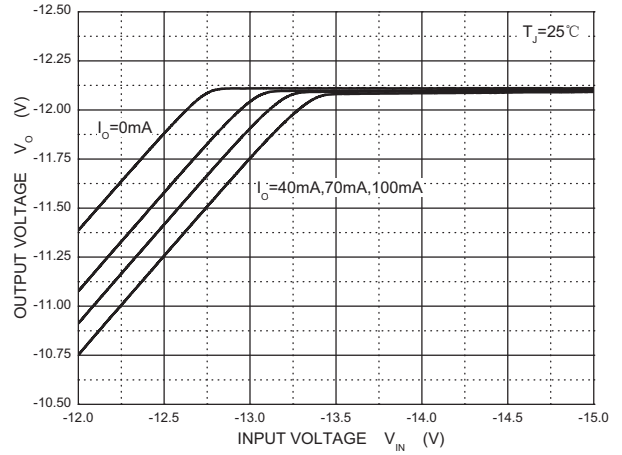

Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as

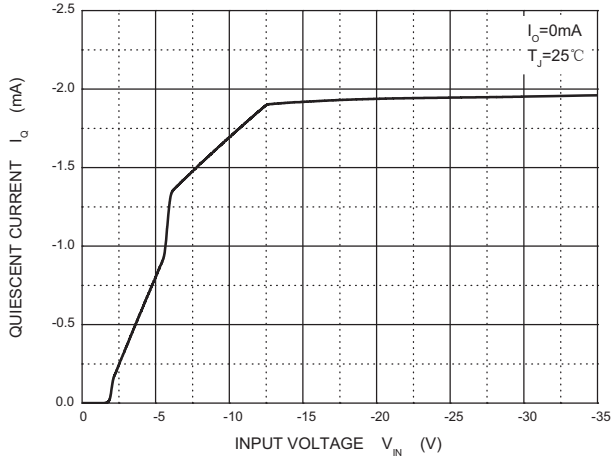possible to the regulators.

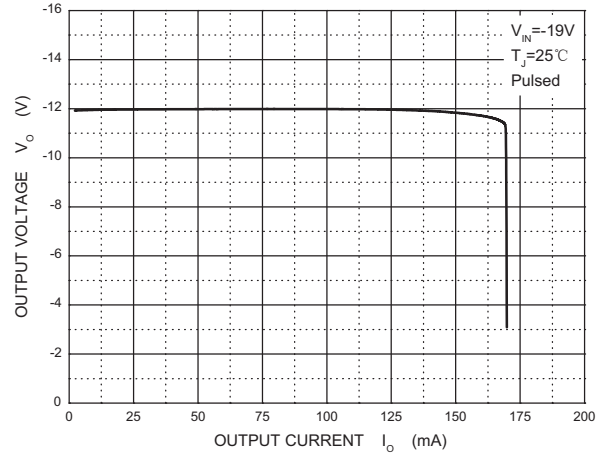**TYPICAL APPLICATION**

Output Characteristics
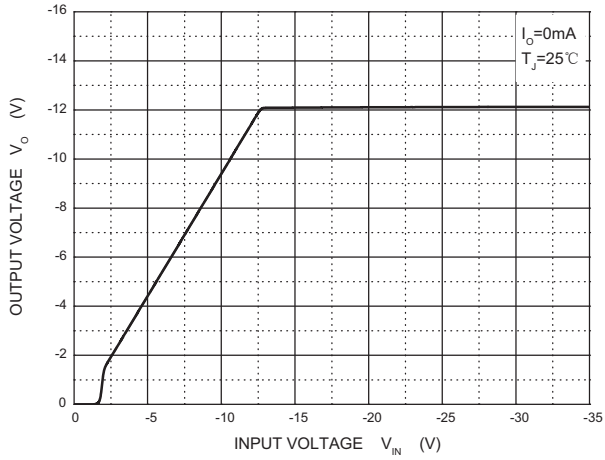
Dropout Characteristics

Quiescent Current vs Input Voltage

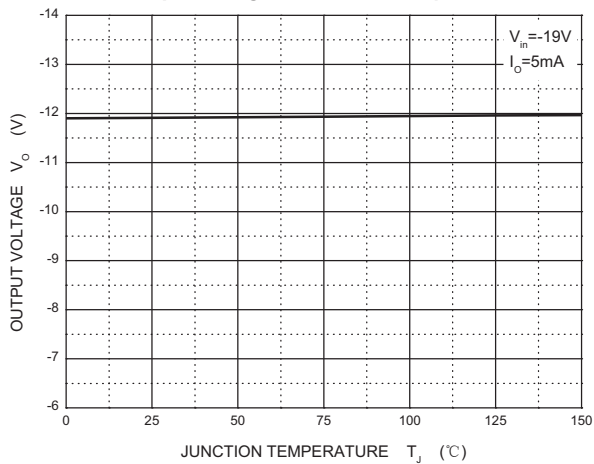**Current Cut-off Grid Voltage**

Output Voltage vs Junction Temperature

Power Derating Curve