

Encapsulate Three Terminal Voltage Regulators

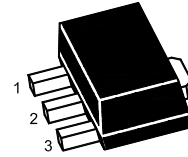
Three-terminal negative voltage regulator

FEATURES

- Maximum output current
 I_{OM} : 0.1 A
- Output voltage
 V_o : -6 V
- Continuous total dissipation
 P_D : 0.5 W

SOT-89 Plastic Package

1. GND
2. IN
3. OUT



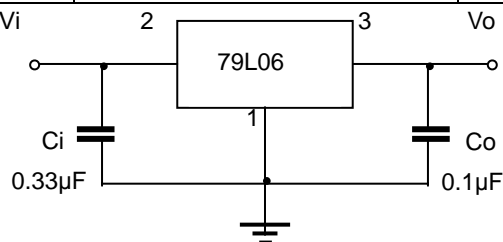
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Units
Input Voltage	V_i	-30	V
Operating Junction Temperature Range	T_{OPR}	0~+150	°C
Storage Temperature Range	T_{STG}	-55~+150	°C

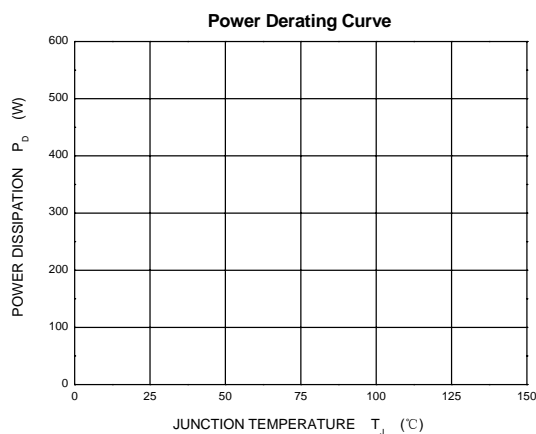
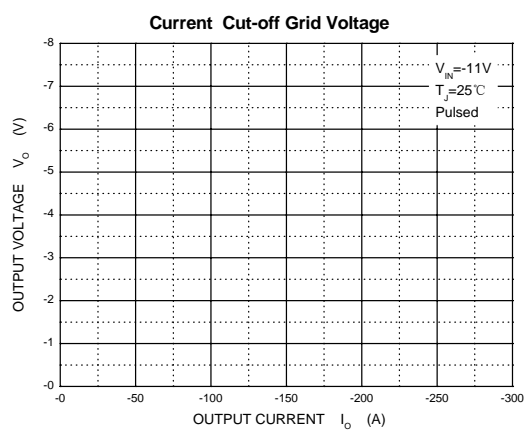
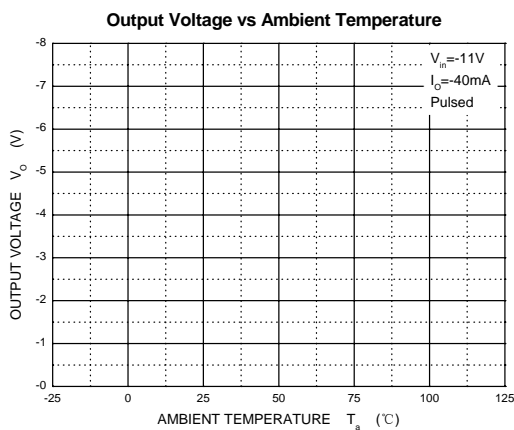
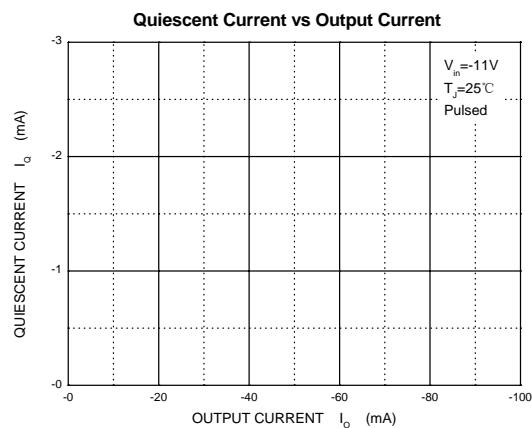
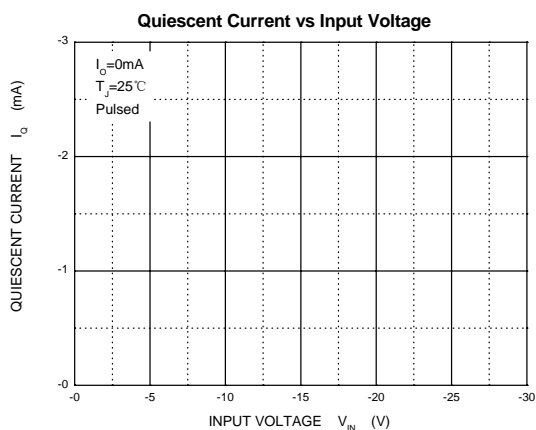
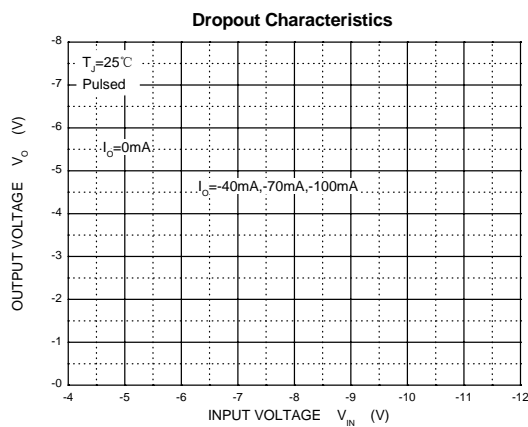
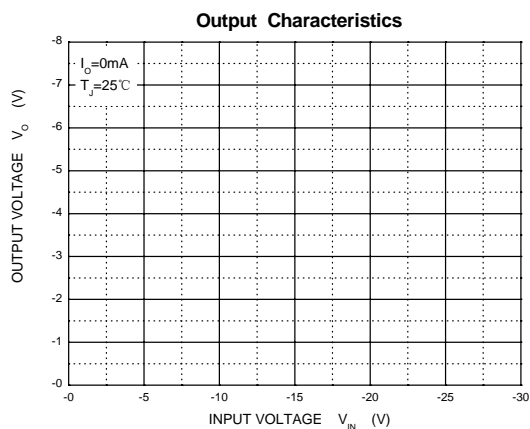
ELECTRICAL CHARACTERISTICS AT SPECIFIED VIRTUAL JUNCTION TEMPERATURE ($V_i = -11V, I_o = 40mA, C_i = 0.33\mu F, C_o = 0.1\mu F$, unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit	
Output Voltage	V_o	25°C	-5.75	-6.0	-6.25	V	
		-8V ≤ V_i ≤ -20V, $I_o = 1mA \sim 40mA$	0-125°C	-5.7	-6.0	-6.3	V
		$I_o = 1mA \sim 70mA$	0-125°C	-5.7	-6.0	-6.3	V
Load Regulation	ΔV_o	$I_o = 1mA \sim 100mA$	25°C	21	80	mV	
		$I_o = 1mA \sim 40mA$	25°C	11	40	mV	
Line Regulation	ΔV_o	-8V ≤ V_i ≤ -20V	25°C	20	175	mV	
		-9V ≤ V_i ≤ -20V	25°C	15	125	mV	
Quiescent Current	I_q	25°C		3.9	6.0	mA	
Quiescent Current Change	ΔI_q	-9V ≤ V_i ≤ -20V	0-125°C		1.5	mA	
	ΔI_q	1mA ≤ V_i ≤ 40mA	0-125°C		0.1	mA	
Output Noise Voltage	V_N	10Hz ≤ f ≤ 100KHz	25°C	44		μV	
Ripple Rejection	RR	-9V ≤ V_i ≤ -19V, $f = 120HZ$	0-125°C	40	48	dB	
Dropout Voltage	V_d	25°C		1.7		V	

TYPICAL APPLICATION

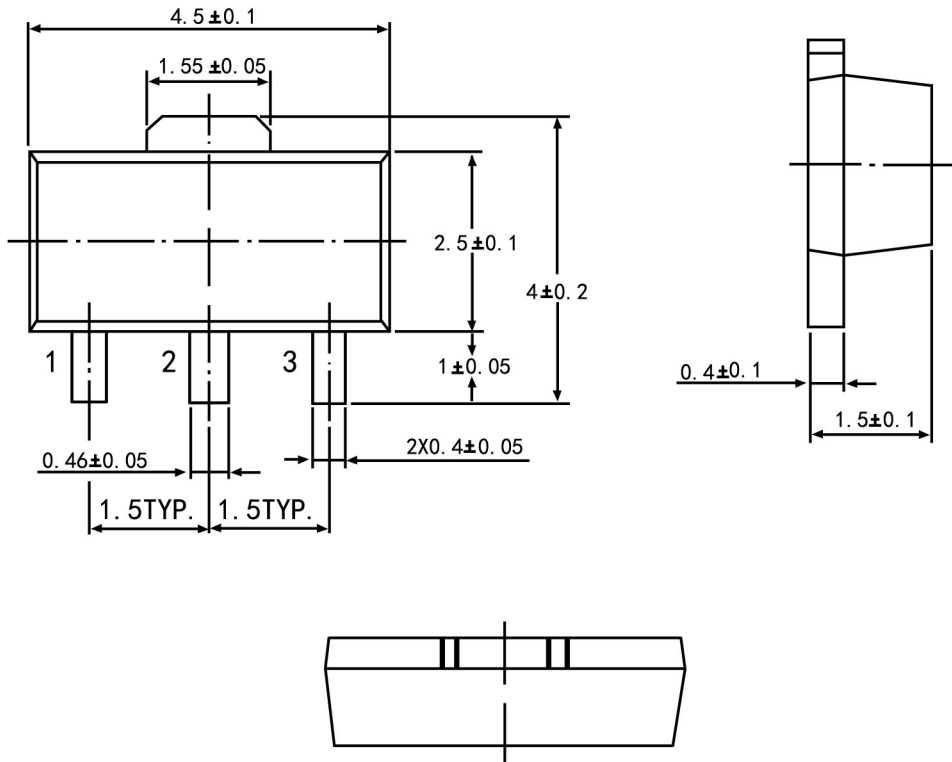


Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close possible to the regulators.





SOT-89 PACKAGE OUTLINE



Symbol	Dimension in Millimeters	
	Min	Max
A	1.40	1.60
B	0.44	0.62
B1	0.35	0.54
C	0.35	0.44
D	4.40	4.60
D1	1.62	1.83
E	2.29	2.60
e	1.50 Typ	
H	3.94	4.25
H1	2.63	2.93
L	0.89	1.20
All Dimensions In mm		