

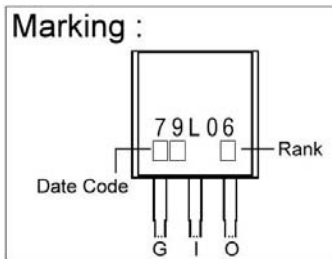
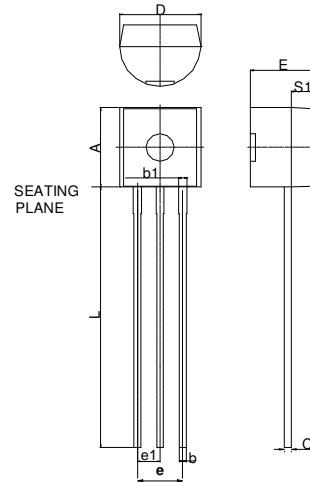
Description

The SM79L06 is monolithic fixed voltage regulator integrated circuit. They are suitable for applications that required supply current up to 100mA.

Features

- * Short Circuit Current Limiting
- * Output Current Up To 100mA
- * Thermal Overload Shutdown Protection

TO-92

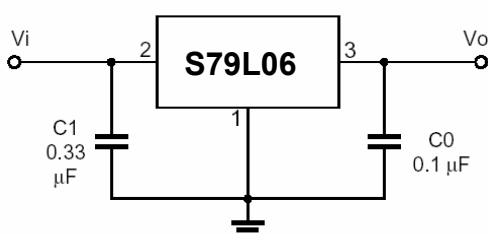


REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.45	4.7	D	4.44	4.7
S1	1.02	-	E	3.30	3.81
b	0.36	0.51	L	12.70	-
b1	0.36	0.76	e1	1.150	1.390
C	0.36	0.51	e	2.42	2.66

Absolute Maximum Ratings

Parameter	Symbol	Ratings	Unit
Input Voltage	V_{IN}	-30	V
Output Current	I_o	100	mA
Operating Junction Temperature Range	T_j	0~+125	°C
Storage Temperature Range	T_{stg}	-55~+150	°C
Total Power Dissipation	P_D	625	mW

Application Circuit



Electrical Characteristics at Ta=25°C

Rank A (3%) $V_I = -12V, I_O = 40mA, T_j = 25^\circ C, C_{IN} = 0.33\mu F, C_{OUT} = 0.1\mu F$ unless otherwise specified

Symbol	Min.	Typ.	Max.	Unit	Test Condition
V_O	-5.82	-6	-6.18	V	$V_{IN} = -12V, I_O = 40mA$
$\Delta V_O - V_{IN}$ (Line Regulation)	-	15	150	mV	$V_{IN} = -8.5V \sim -20V, I_O = 40mA$
$\Delta V_O - I_O$ (Load Regulation)	-	7	60	mV	$V_{IN} = -12V, I_O = 1 \sim 100mA$
I_Q Quiescent Current	-	3.5	6	mA	$V_{IN} = -12V, I_O = 40mA$
V_{NO} Output Noise Voltage	-	120	-	uV	$V_{IN} = -12V, BW = 10Hz \sim 100KHz, I_O = 40mA$
RR Ripple Rejection	41	71	-	dB	$V_{IN} = -9V \sim -19V, I_O = 40mA, E_{IN} = 1V_{P-P}, f = 120Hz$

Rank B (5%) $V_I = -12V, I_O = 40mA, T_j = 25^\circ C, C_{IN} = 0.33\mu F, C_{OUT} = 0.1\mu F$ unless otherwise specified

Symbol	Min.	Typ.	Max.	Unit	Test Condition
V_O	-5.7	-6	-6.3	V	$V_{IN} = -12V, I_O = 40mA$
$\Delta V_O - V_{IN}$ (Line Regulation)	-	15	150	mV	$V_{IN} = -8.5V \sim -20V, I_O = 40mA$
$\Delta V_O - I_O$ (Load Regulation)	-	7	60	mV	$V_{IN} = -12V, I_O = 1 \sim 100mA$
I_Q Quiescent Current	-	3.5	6	mA	$V_{IN} = -12V, I_O = 40mA$
V_{NO} Output Noise Voltage	-	120	-	uV	$V_{IN} = -12V, BW = 10Hz \sim 100KHz, I_O = 40mA$
RR Ripple Rejection	41	71	-	dB	$V_{IN} = -9V \sim -19V, I_O = 40mA, E_{IN} = 1V_{P-P}, f = 120Hz$