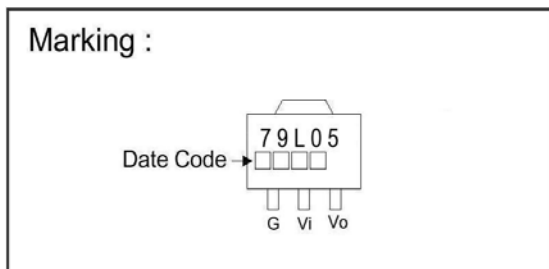
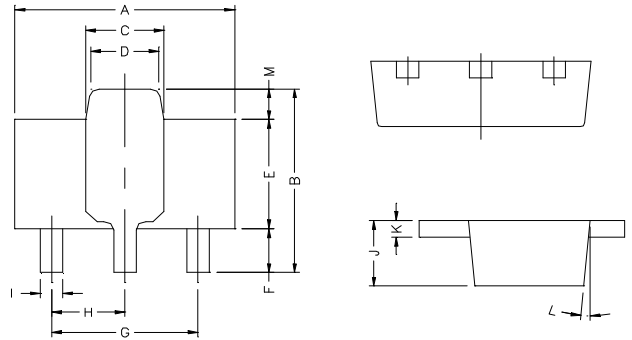


Description

The SM79L05 series of three-terminal negative regulators are available in the SOT-89 package. They can provide local on-card regulation, eliminating the distribution problems associated with single point regulation; furthermore, having the same voltage options as the SM79L05 positive standard series, they are particularly suited for split power supplies. If adequate heat sinking is provided, the SM79L05 series can deliver an output current in excess of 100mA although designed primarily as fixed voltage regulators, these devices can be used with external components to obtain adjustable voltage and currents.

SOT-89

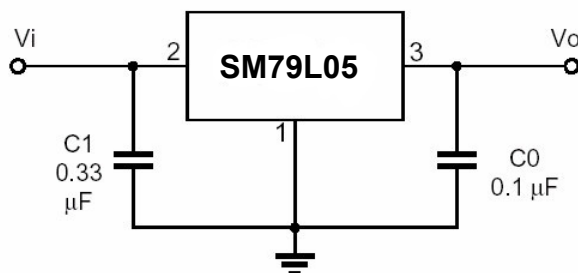


REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.4	4.6	G	3.00	REF.
B	4.05	4.25	H	1.50	REF.
C	1.50	1.70	I	0.40	0.52
D	1.30	1.50	J	1.40	1.60
E	2.40	2.60	K	0.35	0.41
F	0.89	1.20	L	5° TYP.	
			M	0.70 REF.	

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	350	mW

Application Circuit



Electrical Characteristics at Ta=25°C

Rank A (3%) $V_I = -10V, I_O = 40mA, T_j = 25^\circ C, C_{IN} = 0.33\mu F, C_{OUT} = 0.1\mu F$ unless otherwise specified

Symbol	Min.	Typ.	Max.	Unit	Test Condition
V_O	-4.85	-5	-5.15	V	$V_{IN} = -10V, I_O = 40mA$
$\Delta V_O - V_{IN}$ (Line Regulation)	-	15	150	mV	$V_{IN} = -7V \sim -20V, I_O = 40mA$
$\Delta V_O - I_O$ (Load Regulation)	-	7	60	mV	$V_{IN} = -10V, I_O = 1 \sim 100mA$
I_Q Quiescent Current	-	3.5	6	mA	$V_{IN} = -10V, I_O = 40mA$
V_{NO} Output Noise Voltage	-	120	-	uV	$V_{IN} = -10V, BW = 10Hz \sim 100KHz, I_O = 40mA$
RR Ripple Rejection	41	71	-	dB	$V_{IN} = -8V \sim -18V, I_O = 40mA, E_{IN} = 1V_{P-P}, f = 120Hz$

Rank B (5%) $V_I = -10V, I_O = 40mA, T_j = 25^\circ C, C_{IN} = 0.33\mu F, C_{OUT} = 0.1\mu F$ unless otherwise specified

Symbol	Min.	Typ.	Max.	Unit	Test Condition
V_O	-4.75	-5	-5.25	V	$V_{IN} = -10V, I_O = 40mA$
$\Delta V_O - V_{IN}$ (Line Regulation)	-	15	150	mV	$V_{IN} = -7V \sim -20V, I_O = 40mA$
$\Delta V_O - I_O$ (Load Regulation)	-	7	60	mV	$V_{IN} = -10V, I_O = 1 \sim 100mA$
I_Q Quiescent Current	-	3.5	6	mA	$V_{IN} = -10V, I_O = 40mA$
V_{NO} Output Noise Voltage	-	120	-	uV	$V_{IN} = -10V, BW = 10Hz \sim 100KHz, I_O = 40mA$
RR Ripple Rejection	41	71	-	dB	$V_{IN} = -8V \sim -18V, I_O = 40mA, E_{IN} = 1V_{P-P}, f = 120Hz$