Elektronische Bauelemente

S79L05

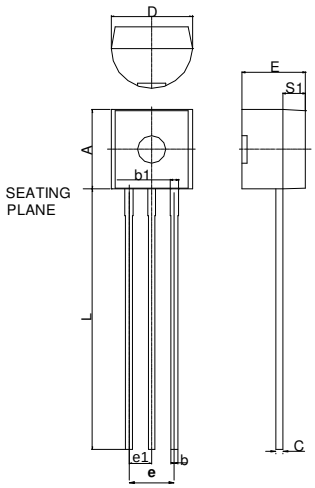
3-Terminal

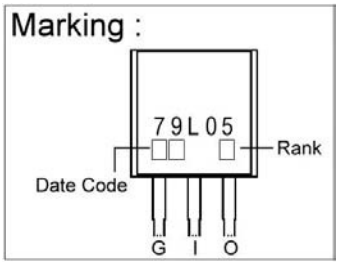
Negative Voltage Regulator

Description

The S79L05 series of three-terminal negative regulators are available in the TO-92 package. They can provide local on card-regulation, eliminating the distribution problems associated with single point regulation;furthe-more, 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 S79L05 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.

TO-92



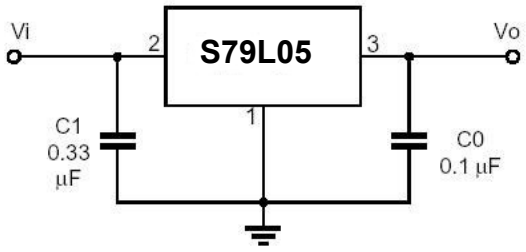


REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.45	4.7	D	4.44	4.7
S_1	1.02	-	E	3.30	3.81
b	0.36	0.51	L	12.70	-
b_1	0.36	0.76	e1	1.150	1.390
C	0.36	0.51	e	2.42	2.66

Absolute Maximum Ratings

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

Application Circuit



Electrical Characteristics at Ta=25℃

Rank A (3%) V_I=-10V,I_O=40mA,Tj=25℃, C_{IN}=0.33uF, C_{OUT}=0.1uF unless otherwise specified

Symbol	Min.	Typ.	Max.	Unit	Test Condition
V_O	-4.85	-5	-5.15	V	V_{IN}=-10V,I_O=40mA
$\triangle V_O$-V_{IN} (Line Regulation)	–	15	150	mV	V_{IN}=-7V~-20V,I_O=40mA
$\triangle V_O$-I_O (Load Regulation)	–	7	60	mV	V_{IN}=-10V,I_O=1~100mA
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~100KHz,I_O=40mA
RR Ripple Rejection	41	71	–	dB	V_{IN}=-8V~-18V,I_O=40mA,E_{IN}=1V_{P-P},f=120Hz

Rank B (5%) V_I=-10V,I_O=40mA,Tj=25℃, C_{IN}=0.33uF, C_{OUT}=0.1uF unless otherwise specified

Symbol	Min.	Typ.	Max.	Unit	Test Condition
V_O	-4.75	-5	-5.25	V	V_{IN}=-10V,I_O=40mA
$\triangle V_O$-V_{IN} (Line Regulation)	–	15	150	mV	V_{IN}=-7V~-20V,I_O=40mA
$\triangle V_O$-I_O (Load Regulation)	–	7	60	mV	V_{IN}=-10V,I_O=1~100mA
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~100KHz,I_O=40mA
RR Ripple Rejection	41	71	–	dB	V_{IN}=-8V~-18V,I_O=40mA,E_{IN}=1V_{P-P},f=120Hz