

SOT-89 Plastic-Encapsulate Voltage Regulators

79L05

Three-terminal negative voltage regulator

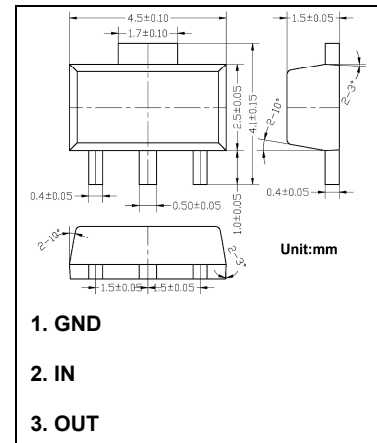
Features:

Maximum Output current $I_o: 0.1A$

Output voltage $V_O: -5V$

Continuous total dissipation

$P_D: 0.5W (T_a = 25^\circ C)$



Absolute Maximum Ratings (Operating temperature range applies unless otherwise specified)

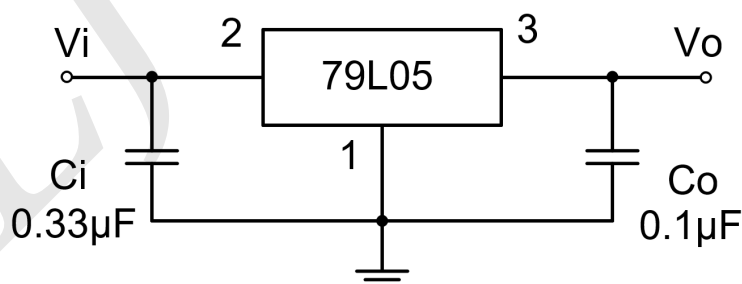
Symbol	Parameter	Value	Unit
V _i	Input Voltage	-30	V
T _{OPR}	Operating Junction Temperature Range	-40 to +125	°C
T _{STG}	Storage Temperature Range	-55 to +150	°C

Electrical Characteristics at Specified Virtual Junction Temperature

($V_i = -10V$, $I_o = 40mA$, $C_i = 0.33\mu F$, $C_o = 0.1\mu F$, unless otherwise specified)

Symbol	Parameter	Test conditions		Min	Typ	Max	Unit
Vo	Output Voltage		25°C	-4.8	-5.0	-5.2	V
		-7V≤ Vi ≤-20V, Io=1mA ~ 40mA	0-125°C	-4.75	-5.0	-5.25	V
		Io=1mA ~ 70mA		-4.75	-5.0	-5.25	V
ΔVo	Load Regulation	Io=1mA ~ 100mA	25°C		20	60	mV
		Io=1mA ~ 40mA	25°C		10	30	mV
ΔVo	Line Regulation	-7V≤ Vi ≤-20V	25°C		15	150	mV
		-8V≤ Vi ≤-20V	25°C		12	100	mV
Iq	Quiescent Current		25°C			6	mA
ΔIq	Quiescent Current Change	-8V≤ Vi ≤-20V	0-125°C			1.5	mA
		1mA≤Io≤40mA	0-125°C			0.1	mA
VN	Output Noise Voltage	f =10Hz to 100KHz	25°C		40		μV
RR	Ripple Rejection	f =120Hz,-8V≤ Vi ≤ -18V	0-125°C	41	49		dB
Vd	Dropout Voltage		25°C		1.7		V

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 Characteristics

