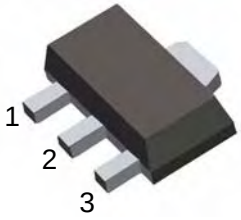
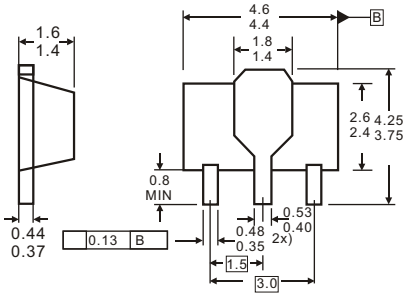
79L05

Three-terminal negative voltage regulator



1. GND
2. IN
3. OUT

SOT-89



Dimensions in inches and (millimeters)

Features

- ✧ Maximum Output current
  $I_{OM:}$ 0.1 A
- ✧ Output voltage
  V_o: -5 V
- ✧ Continuous total dissipation
  P_D: 0.5 W

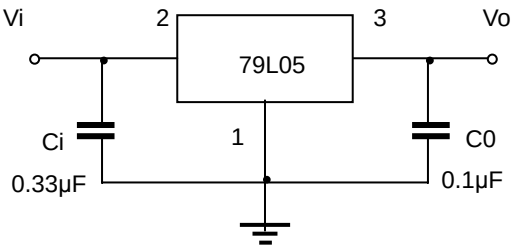
ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Units
Input Voltage	V_i	-30	V
Operating Junction Temperature Range	T_{OPR}	0~+125	℃
Storage Temperature Range	T_{STG}	-55~+150	℃

ELECTRICAL CHARACTERISTICS (V_i=-10V,Io=40mA,Ci=0.33μF,Co=0.1μF, unless otherwise specified)

Parameter	Symbol	Test conditions		MIN	TYP	MAX	UNIT
Output voltage	Vo		25℃	-4.8	-5.0	-5.2	V
		-7V≤V_I≤-20V, Io=1mA~40mA	0-125℃	-4.75	-5.0	-5.25	V
		Io=1mA~70mA		-4.75	-5.0	-5.25	V
Load Regulation	ΔVo	Io=1mA~100mA	25℃		20	60	mV
		Io=1mA~40mA	25℃		10	30	mV
Line regulation	ΔVo	-7V≤V_I≤-20V	25℃		15	150	mV
		-8V≤V_I≤-20V	25℃		12	100	mV
Quiescent Current	Iq		25℃			6	mA
Quiescent Current Change	ΔIq	-8V≤V_I≤-20V	0-125℃			1.5	mA
	ΔIq	1mA≤V_I≤40mA	0-125℃			0.1	mA
Output Noise Voltage	V_N	10Hz≤f≤100KHz	25℃		40		uV
Ripple Rejection	RR	-8V≤V_I≤-18V,f=120Hz	0-125℃	41	49		dB
Dropout Voltage	Vd		25℃		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.

TypicalCharacteristics