

## NEGATIVE VOLTAGE REGULATOR

**LM79L05**



- pin 1. Ground
- 2. Input
- 3. Output

**TO-92**  
**Plastic Package**

The Voltages Available allow these Regulators to be used in Logic Systems, Instrumentation, Hi-Fi Audio Circuits and other Solid State Electronic Equipment

### ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNIT
Input Voltage	$V_{IN}$	-30	V
Power Dissipation	$P_D$	625	mW
Operating Junction Temperature Range	$T_j$	0 to 150	°C
Storage Temperature Range	$T_{stg}$	- 65 to +150	°C
Lead Temperature 1.6mm (1/16inch) from Case for 10 seconds	$T_L$	260	°C

### Recommended Operating Conditions

DESCRIPTION	SYMBOL	MIN	TYP	MAX	UNIT
Input Voltage	$V_I$	-7		-20	V
Output Current	$I_O$			100	mA
Operating Junction Temperature	$T_j$	0		125	°C

### ELECTRICAL CHARACTERISTICS

(At Specified Virtual Junction Temperature,  $V_I = -10V$ ,  $I_O = 40mA$ , (unless specified otherwise))

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Output Voltage	$V_O$	25°C	-4.80		-5.20	V
		$I_O = 1mA$ to 40mA, 0°C to 125°C $V_I = -7V$ to -20V, 0°C to 125°C	-4.75		-5.25	V
		$I_O = 1mA$ to 70mA, 0°C to 125°C	-4.75		-5.25	V
Line Regulation	$R_{BGIN}$	$V_I = -7V$ to -20V, 25°C			150	mV
		$V_I = -8$ to -20V, 25°C			100	mV
Ripple Rejection	$R_R$	$V_I = -8V$ to -18V, $f = 120Hz$ , 25°C	41			dB
Load Regulation	$R_{BGL}$	$I_O = 1mA$ to 100mA, 25°C			60	mV
		$I_O = 1mA$ to 40mA, 25°C			30	mV
Output Noise Voltage	$V_{NO}$	$f = 10Hz$ to 100KHz, 25°C		40		µV
Dropout Voltage	$V_{DIF (min)}$	25°C		1.7		V
Quiescent Current	$I_Q$	25°C			6.0	mA
		125°C			5.5	mA
Quiescent Current Change	$\Delta I_{QIN}$	$V_I = -8V$ to -20V, 0°C to 125°C			1.5	mA
	$\Delta I_{QL}$	$I_O = 1mA$ to 40mA, 0°C to 125°C			0.1	mA

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Continental Device India Limited

C-120 Naraina Industrial Area, New Delhi 110 028, India.

Telephone + 91-11-2579 6150, 5141 1112 Fax + 91-11-2579 5290, 5141 1119

email@cdil.com www.cdilsemi.com