



DC COMPONENTS CO., LTD.  
INTEGRATED CIRCUIT

DA79L05  
DA79L05A

## TECHNICAL SPECIFICATIONS OF 3-TERMINAL NEGATIVE VOLTAGE REGULATOR

### Description

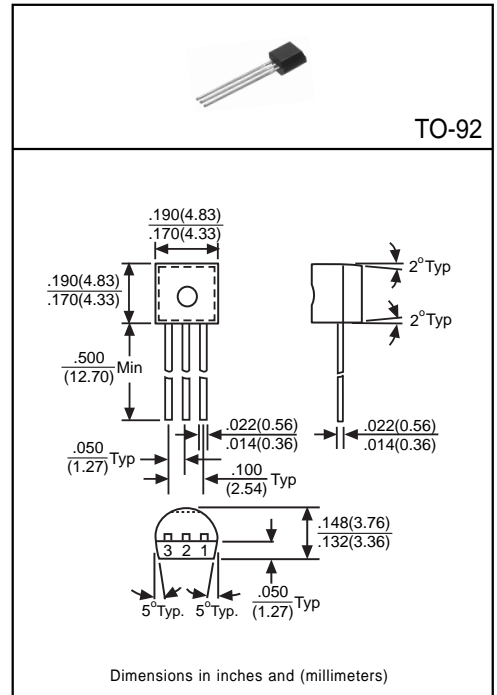
These regulators employ internal current limiting and thermal shutdown, making them essentially indestructible. They can deliver up to 100mA output current, if the case temperature can keep in  $T_c=25^{\circ}\text{C}$ . They are intended as fixed voltage regulators in a wide range of applications including local(on-card) regulation for elimination of noise and distribution problems associated with single-point regulation. In addition, they can be used with power pass elements to make high-current voltage regulators.

### Pinning

- 1 = Ground
- 2 = Input
- 3 = Output

### Absolute Maximum Ratings ( $T_A=25^{\circ}\text{C}$ )

Characteristic	Symbol	Rating	Unit
Input Voltage	$V_i$	-30	V
Total Power Dissipation	$P_D$	Internal limit	W
Operating Temperature Range	$T_{opr}$	-30 to +75	$^{\circ}\text{C}$
Maximum Junction Temperature	$T_J$	125	$^{\circ}\text{C}$
Storage Temperature Range	$T_{STG}$	-40 to +125	$^{\circ}\text{C}$



### Electrical Characteristics

( $V_{in}=-10\text{V}$ ,  $I_{out}=40\text{mA}$ ,  $0^{\circ}\text{C}\leq T_J\leq 125^{\circ}\text{C}$ ,  $C_{in}=0.33\mu\text{F}$ ,  $C_{out}=0.1\mu\text{F}$ , unless otherwise specified)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Output Voltage	DA79L05A	-4.85	-5.00	-5.15	V	$T_J=25^{\circ}\text{C}$
	DA79L05	-4.75	-5.00	-5.25		
Line Regulation	Regline	-	-	150	mV	$T_J=25^{\circ}\text{C}$ , $-7\text{V}\leq V_{in}\leq -20\text{V}$
Load Regulation	Regload	-	-	60	mV	$T_J=25^{\circ}\text{C}$ , $1\text{mA}\leq I_o\leq 100\text{mA}$
Input Bias Current	$I_{IB}$	-	-	6.0	mA	$T_J=25^{\circ}\text{C}$
Output Noise Voltage	$V_n$	-	120	-	$\mu\text{V}$	$T_A=25^{\circ}\text{C}$ , $10\text{Hz}\leq f\leq 100\text{KHz}$
Ripple Rejection	RR	41	71	-	dB	$-8\text{V}\leq V_{in}\leq -18\text{V}$ , $f=120\text{Hz}$