



DC COMPONENTS CO., LTD.

INTEGRATED CIRCUIT

DA79L05

DA79L05A

TECHNICAL SPECIFICATIONS OF 3-TERMINAL NEGATIVE VOLTAGE REGULATOR

Description

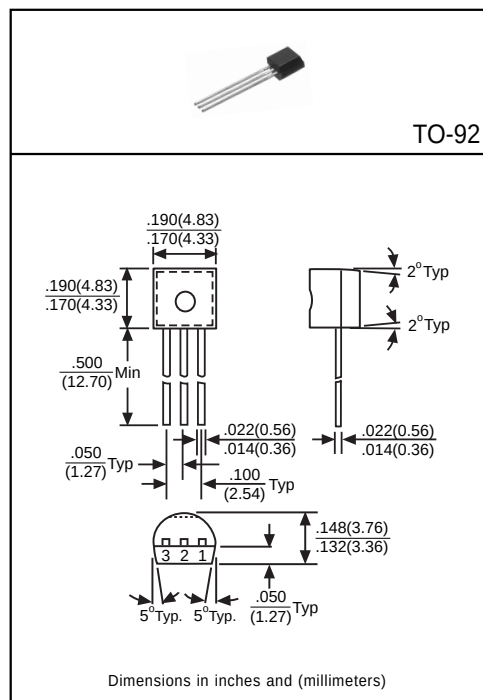
These regulators employ internal current limiting and thermal shutdown, making them essentially indestructible. They can deliver up to 100mA output current, if the case temperature can keep in $T_c=25^{\circ}\text{C}$. They are intended as fixed voltage regulators in a wide range of applications including 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	V_o	-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	-	μV	$T_A=25^{\circ}\text{C}$, $10\text{Hz}\leq f\leq 100\text{KHz}$
Ripple Rejection		RR	41	71	-	dB	$-8\text{V}\leq V_{in}\leq -18\text{V}$, $f=120\text{Hz}$