



# DC COMPONENTS CO., LTD.

## INTEGRATED CIRCUIT

DA79L06

### TECHNICAL SPECIFICATIONS OF 3-TERMINAL NEGATIVE VOLTAGE REGULATOR

#### Description

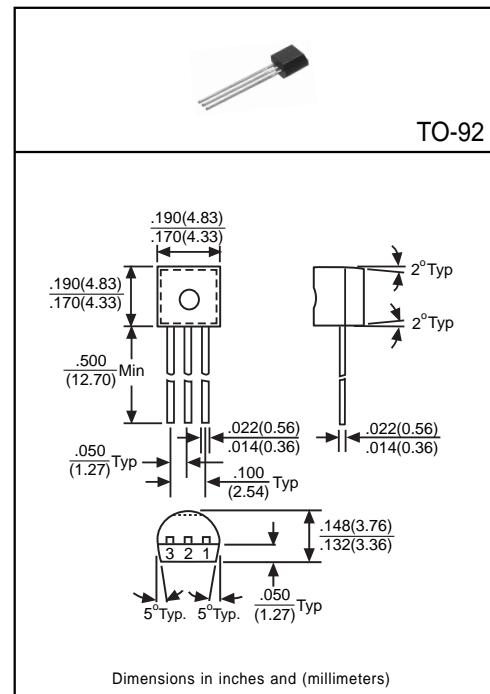
These regulators employ internal current limiting and thermal shutdown, making them essentially indestructible. They can deliver up to 100mA output current, if the case temperature can keep in  $T_c=25^\circ\text{C}$ . They are intended as fixed voltage regulators in a wide range of applications including 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 ( $\text{T}_A=25^\circ\text{C}$ )

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



Dimensions in inches and (millimeters)

#### Electrical Characteristics

( $\text{Vin}=-12\text{V}$ ,  $\text{Iout}=40\text{mA}$ ,  $0^\circ\text{C} \leq T_J \leq 125^\circ\text{C}$ ,  $C_{\text{in}}=0.33\mu\text{F}$ ,  $C_{\text{out}}=0.1\mu\text{F}$ , unless otherwise specified)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Output Voltage	$V_O$	-5.76	-6.00	-6.24	V	$T_J=25^\circ\text{C}$
Line Regulation	Regline	-	-	150	mV	$T_J=25^\circ\text{C}$ , $-8.5\text{V} \leq \text{Vin} \leq -20\text{V}$
Load Regulation	Regload	-	-	60	mV	$T_J=25^\circ\text{C}$ , $1\text{mA} \leq \text{I}_{\text{o}} \leq 100\text{mA}$
Input Bias Current	$I_{\text{IB}}$	-	-	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	$-9\text{V} \leq \text{Vin} \leq -19\text{V}$ , $f=120\text{Hz}$