



DC COMPONENTS CO., LTD.

INTEGRATED CIRCUIT

DA79L09

TECHNICAL SPECIFICATIONS OF 3-TERMINAL NEGATIVE VOLTAGE REGULATOR

Description

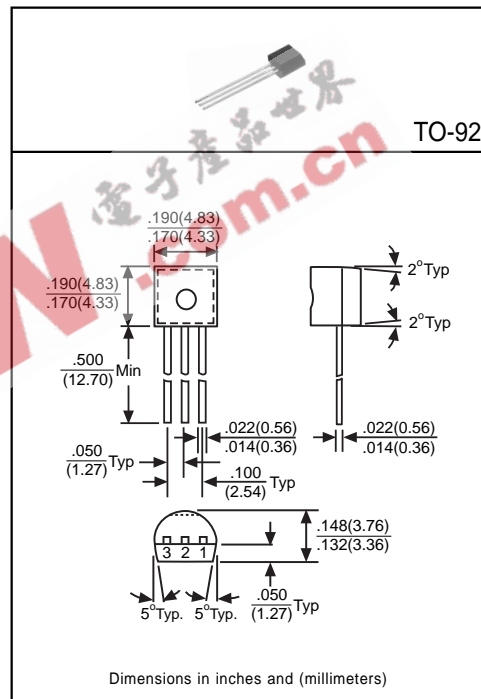
These regulators employ internal current limiting and thermal shutdown, making them essentially indestructible. They can deliver up to 100mA output current, if the case temperature can keep in $T_c=25^{\circ}\text{C}$. They are intended as fixed voltage regulators in a wide range of applications including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

($V_{in}=-15\text{V}$, $I_{out}=40\text{mA}$, $0^{\circ}\text{C} \leq T_J \leq 125^{\circ}\text{C}$, $C_{in}=0.33\mu\text{F}$, $C_{out}=0.1\mu\text{F}$, unless otherwise specified)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Output Voltage	V_O	-8.64	-9.00	-9.36	V	$T_J=25^{\circ}\text{C}$
Line Regulation	Reg_{line}	-	-	200	mV	$T_J=25^{\circ}\text{C}$, $-12.5\text{V} \leq V_{in} \leq -24\text{V}$
Load Regulation	Reg_{load}	-	-	90	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	-	210	-	μV	$T_A=25^{\circ}\text{C}$, $10\text{Hz} \leq f \leq 100\text{KHz}$
Ripple Rejection	RR	37	64	-	dB	$-12\text{V} \leq V_{in} \leq -22\text{V}$, $f=150\text{Hz}$