



DC COMPONENTS CO., LTD.  
INTEGRATED CIRCUIT

DA79L12  
DA79L12A

TECHNICAL SPECIFICATIONS OF 3-TERMINAL NEGATIVE VOLTAGE REGULATOR

Description

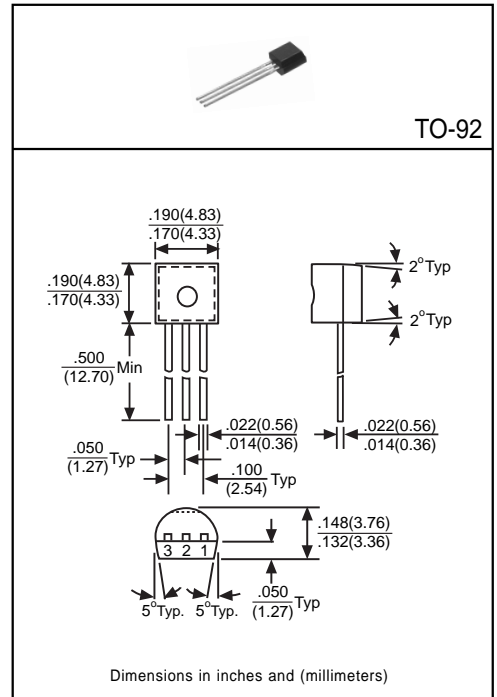
These regulators employ internal current limiting and thermal shutdown, making them essentially indestructible. They can deliver up to 100mA output current, if the case temperature can keep in  $T_c=25^{\circ}\text{C}$ . They are intended as fixed voltage regulators in a wide range of applications including 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	$V_i$	-35	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

( $V_{in}=-19\text{V}$ ,  $I_{out}=40\text{mA}$ ,  $0^{\circ}\text{C}\leq T_J\leq 125^{\circ}\text{C}$ ,  $C_{in}=0.33\mu\text{F}$ ,  $C_{out}=0.1\mu\text{F}$ , unless otherwise specified)

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Output Voltage	DA79L12A	-11.64	-12.00	-12.36	V	$T_J=25^{\circ}\text{C}$
	DA79L12	-11.40	-12.00	-12.60		
Line Regulation	Regline	-	-	250	mV	$T_J=25^{\circ}\text{C}$ , $-14.5\text{V}\leq V_{in}\leq -27\text{V}$
Load Regulation	Regload	-	-	100	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	-	$\mu\text{V}$	$T_A=25^{\circ}\text{C}$ , $10\text{Hz}\leq f\leq 100\text{KHz}$
Ripple Rejection	RR	37	64	-	dB	$-15\text{V}\leq V_{in}\leq -25\text{V}$ , $f=190\text{Hz}$