



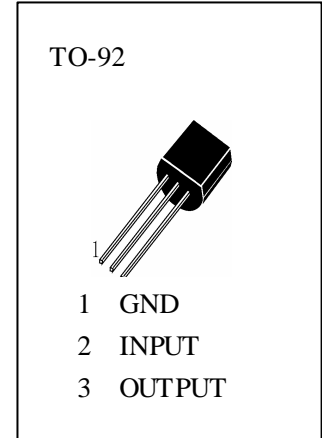
# H79L24

## Description

H79L24 is the three terminal negative Regulators with single chip, and in a wide range of applications. It supplies fixed output voltages of -24V, deliver over 100mA output current ,and employs internal current limiting, thermal shut down and safe operating area protection, making it essentially indestructible.

## Features

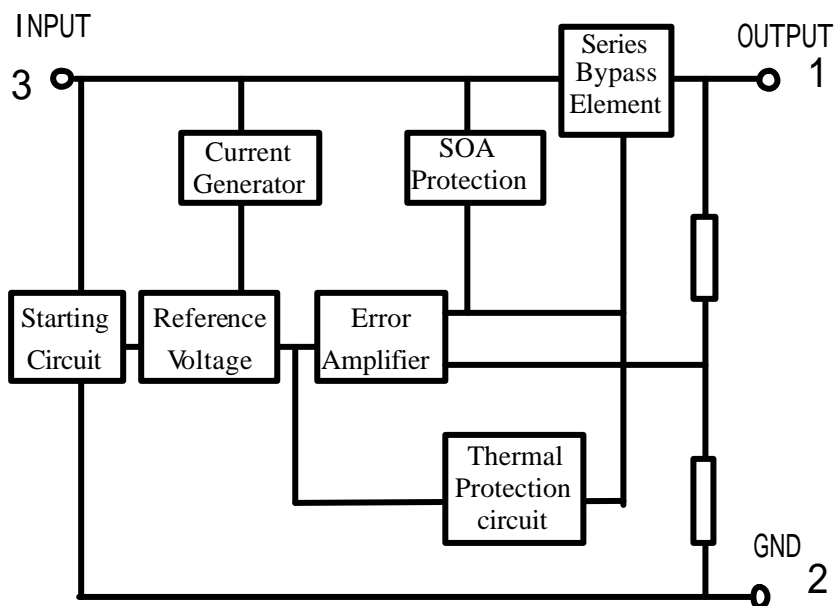
- Output current up to 100mA
- Low noise
- High Ripple Rejection
- Power Amplify Output Protection
- Thermal Overload Protection
- Current Overload Protection and Short Circuit Protection



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

$V_{IN}$ —Input Voltage.....	-45V
$T_{amb}$ —Operating Temperature Range.....	-20~85
$T_{stg}$ —Storage Temperature Range.....	-55~150
$T_j$ —Junction Temperature.....	-55~150

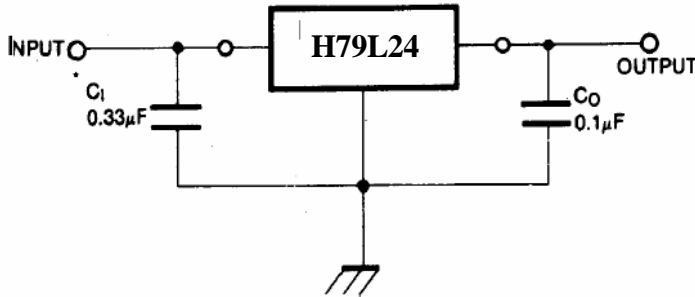
## Internal Block Diagram





# H79L24

## Typical Application



## ELECTRICAL CHARACTERISTICS

( Unless otherwise specified,  $V_{IN}=-33V, I_o=40mA, 0$   $T_j$  125 ,  $C_{IN}=0.33 \mu F, C_{OUT}=0.1 \mu F$  )

Symbol	Parameter	Min.	Typ.	Max.	Unit	Conditions
$V_o$	Output Voltage	-23	-24	-25	V	$T_j=25$
		-22.8		-25.2		$-38V \leq V_{IN} \leq -27V, 1mA \leq I_o \leq 40mA$
		-22.8		-25.2		$V_{IN}=-33V, 1mA \leq I_o \leq 70mA$
$V_o$	Line Regulation			350	mV	$T_j=25$ , $-38V \leq V_{IN} \leq -27V$
				300		$T_j=25$ , $-38V \leq V_{IN} \leq -28V$
$V_o$	Load Regulation			200	mV	$T_j=25$ , $1mA \leq I_o \leq 100mA$
				100		$T_j=25$ , $1mA \leq I_o \leq 40mA$
$I_o$	Quiescent Current			6.5	mA	$T_j=25$
$I_o$	Quiescent Current Change			1.5	mA	$-38V \leq V_{IN} \leq -28V$
				0.1		$1mA \leq I_o \leq 40mA$
$V_N$	Output Noise Voltage			150	$\mu V$	$T_j=25$ , $10Hz \leq f \leq 100kHz$
RR	Ripple Rejection	31	47		dB	$T_j=25$ , $-35V \leq V_{IN} \leq -29V, f=120Hz$
$V_D$	Dropout Voltage		1.7		V	$T_j=25$