

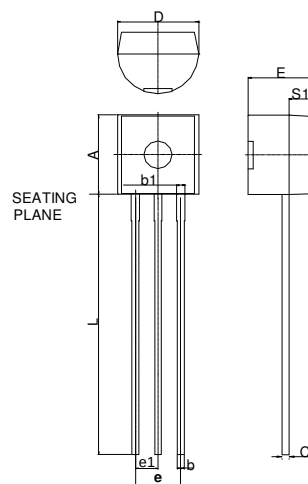
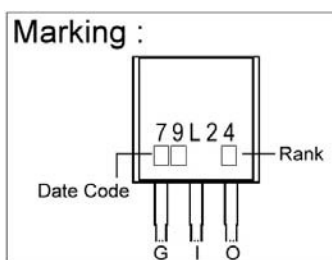
Description

The S79L24 is monolithic fixed voltage regulator integrated circuit. They are suitable for applications that required supply current up to 100mA.

Features

- * Short Circuit Current Limiting
- * Output Current Up To 100mA
- * Thermal Overload Shutdown Protection

TO-92

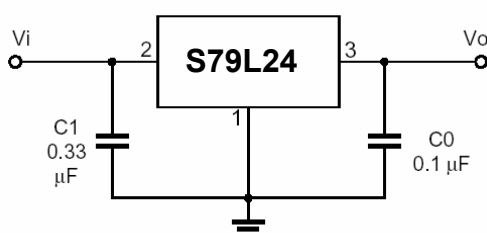


REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.45	4.7	D	4.44	4.7
S1	1.02	-	E	3.30	3.81
b	0.36	0.51	L	12.70	-
b1	0.36	0.76	e1	1.150	1.390
C	0.36	0.51	e	2.42	2.66

Absolute Maximum Ratings

Parameter	Symbol	Ratings	Unit
Input Voltage	V_{IN}	-40	V
Output Current	I_O	100	mA
Operating Junction Temperature Range	T_j	0~+125	°C
Storage Temperature Range	T_{stg}	-55~+150	°C
Total Power Dissipation	P_D	625	mW

Application Circuit



Electrical Characteristics ($V_{in}=-33$, $I_o=40\text{mA}$, $T_j=25^\circ\text{C}$, $C_1=0.33\mu\text{F}$, $C_o=0.1\mu\text{F}$ unless otherwise specified)

Rank A (3%)				Unit	Test Conditions
Symbol	Min.	Typ.	Max.		
VO	-23.28	-24	-24.72	V	$V_{in}=-27\text{V} \sim -38\text{V}$, $I_o=1\text{mA} \sim 40\text{mA}$
	-23.28	-24	-24.72		$V_{in}=-33\text{V} \sim V_{\text{max}}$, $I_o=1\text{mA} \sim 70\text{mA}$ (Note1)
ΔV_O (Line Regulation)	-	-	350	mV	$V_{in}=-27\text{V} \sim -38\text{V}$, $I_o=40\text{mA}$
	-	-	300		$V_{in}=-28\text{V} \sim -38\text{V}$, $I_o=40\text{mA}$
ΔV_O (Load Regulation)	-	-	200	mV	$V_{in}=-33\text{V}$, $I_o=1\text{mA} \sim 100\text{mA}$
	-	-	100		$V_{in}=-33\text{V}$, $I_o=1\text{mA} \sim 40\text{mA}$
IQ	-	-	6.0	mA	$T_j=25^\circ\text{C}$, $V_{in}=-33\text{V}$, $I_o=40\text{mA}$
ΔI_Q	-	-	1.5	mA	$V_{in}=-28\text{V} \sim -38\text{V}$, $I_o=40\text{mA}$
	-	-	0.1		$V_{in}=-33\text{V}$, $I_o=1\text{mA} \sim 40\text{mA}$
Vn	-	200	-	μV	$f=10\text{Hz} \sim 100\text{KHz}$
RR	31	47	-	db	$V_{in}=-29\text{V} \sim -35\text{V}$, $I_o=40\text{mA}$, $f=120\text{Hz}$
VD	-	1.7	-	V	$T_j=25^\circ\text{C}$

Electrical Characteristics ($V_{in}=-33$, $I_o=40\text{mA}$, $T_j=25^\circ\text{C}$, $C_1=0.33\mu\text{F}$, $C_o=0.1\mu\text{F}$ unless otherwise specified)

Rank B (5%)				Unit	Test Conditions
Symbol	Min.	Typ.	Max.		
VO	-22.80	-24	-25.20	V	$V_{in}=-27\text{V} \sim -38\text{V}$, $I_o=1\text{mA} \sim 40\text{mA}$
	-22.80	-24	-25.20		$V_{in}=-33\text{V} \sim V_{\text{max}}$, $I_o=1\text{mA} \sim 70\text{mA}$ (Note1)
ΔV_O (Line Regulation)	-	-	350	mV	$V_{in}=-27\text{V} \sim -38\text{V}$, $I_o=40\text{mA}$
	-	-	300		$V_{in}=-28\text{V} \sim -38\text{V}$, $I_o=40\text{mA}$
ΔV_O (Load Regulation)	-	-	200	mV	$V_{in}=-33\text{V}$, $I_o=1\text{mA} \sim 100\text{mA}$
	-	-	100		$V_{in}=-33\text{V}$, $I_o=1\text{mA} \sim 40\text{mA}$
IQ	-	-	6.0	mA	$T_j=25^\circ\text{C}$, $V_{in}=-33\text{V}$, $I_o=40\text{mA}$
ΔI_Q	-	-	1.5	mA	$V_{in}=-28\text{V} \sim -38\text{V}$, $I_o=40\text{mA}$
	-	-	0.1		$V_{in}=-33\text{V}$, $I_o=1\text{mA} \sim 40\text{mA}$
Vn	-	200	-	μV	$f=10\text{Hz} \sim 100\text{KHz}$
RR	31	47	-	db	$V_{in}=-29\text{V} \sim -35\text{V}$, $I_o=40\text{mA}$, $f=120\text{Hz}$
VD	-	1.7	-	V	$T_j=25^\circ\text{C}$

Note: 1. Power dissipation $< 0.625\text{W}$