Elektronische Bauelemente

S79L24

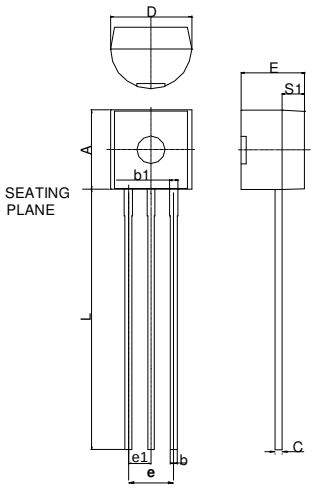
3-Terminal

Negative Voltage Regulator

Description

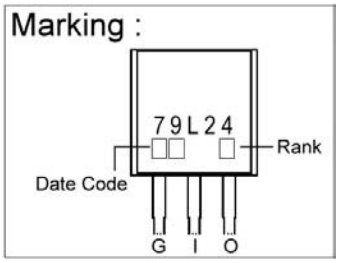
The S79L24 is monolithic fixed voltage regulator integrated circuit. They are suitable for applications that required supply current up to 100mA.

TO-92



Features

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

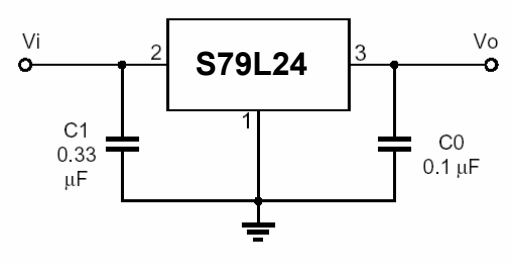


REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.45	4.7	D	4.44	4.7
S_1	1.02	-	E	3.30	3.81
b	0.36	0.51	L	12.70	-
b_1	0.36	0.76	e1	1.150	1.390
C	0.36	0.51	e	2.42	2.66

Absolute Maximum Ratings

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

Application Circuit



Electrical Characteristics (Vin=-33, Io=40mA, Tj=25℃, C1=0.33uF, Co=0.1uF unless otherwise specified)

Rank A (3%)				Unit	Test Conditions
Symbol	Min.	Typ.	Max.		
VO	-23.28	-24	-24.72	V	Vin=-27V ~ -38V, Io=1mA ~ 40mA
	-23.28	-24	-24.72		Vin=-33V ~ Vmax, Io=1mA ~ 70mA (Note1)
ΔVO (Line Regulation)	-	-	350	mV	Vin=-27V ~ -38V, Io=40mA
	-	-	300		Vin=-28V ~ -38V, Io=40mA
ΔVO (Load Regulation)	-	-	200	mV	Vin=-33V, Io=1mA ~ 100mA
	-	-	100		Vin=-33V, Io=1mA ~ 40mA
IQ	-	-	6.0	mA	Tj=25℃, Vin=-33V, Io =40mA
ΔIQ	-	-	1.5	mA	Vin=-28V ~ -38V, Io=40mA
	-	-	0.1		Vin=-33V, Io=1mA ~ 40mA
Vn	-	200	-	uV	f =10Hz ~ 100KHz
RR	31	47	-	db	Vin=-29V ~ -35V, Io=40mA, f=120Hz
VD	-	1.7	-	V	Tj=25℃

Electrical Characteristics (Vin=-33, Io=40mA, Tj=25℃, C1=0.33uF, Co=0.1uF unless otherwise specified)

Rank B (5%)				Unit	Test Conditions
Symbol	Min.	Typ.	Max.		
VO	-22.80	-24	-25.20	V	Vin=-27V ~ -38V, Io=1mA ~ 40mA
	-22.80	-24	-25.20		Vin=-33V ~ Vmax, Io=1mA ~ 70mA (Note1)
ΔVO (Line Regulation)	-	-	350	mV	Vin=-27V ~ -38V, Io=40mA
	-	-	300		Vin=-28V ~ -38V, Io=40mA
ΔVO (Load Regulation)	-	-	200	mV	Vin=-33V, Io=1mA ~ 100mA
	-	-	100		Vin=-33V, Io=1mA ~ 40mA
IQ	-	-	6.0	mA	Tj=25℃, Vin=-33V, Io=40mA
ΔIQ	-	-	1.5	mA	Vin =-28V ~ -38V, Io=40mA
	-	-	0.1		Vin=-33V, Io=1mA ~ 40mA
Vn	-	200	-	uV	f =10Hz ~ 100KHz
RR	31	47	-	db	Vin =-29V ~ -35V, Io=40mA, f=120Hz
VD	-	1.7	-	V	Tj=25℃

Note: 1. Power dissipation < 0.625W