

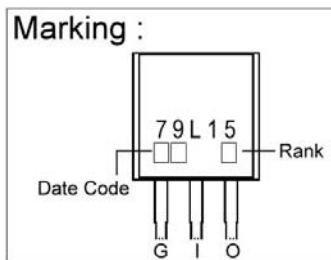
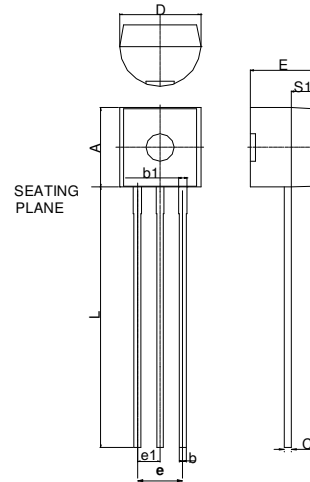
## Description

The SM79L15 is monolithic fixed voltage regulator integrated circuit. They are suitable for applications that require supply current up to 100mA.

## Features

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

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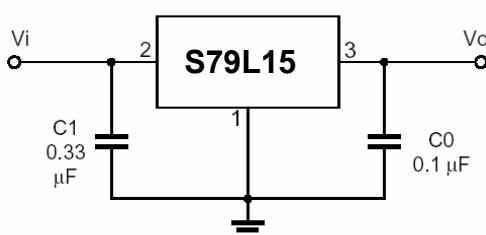


REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	4.45	4.7	D	4.44	4.7
S1	1.02	-	E	3.30	3.81
b	0.36	0.51	L	12.70	-
b1	0.36	0.76	e1	1.150	1.390
C	0.36	0.51	e	2.42	2.66

## Absolute Maximum Ratings

Parameter	Symbol	Ratings	Unit
Input Voltage	$V_{IN}$	-35	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 at Ta=25°C** (Vin=-23, Io=40mA, Tj=25°C, C1=0.33uF, Co=0.1uF unless otherwise specified)

Rank A ( 3% )				Unit	Test Conditions
Symbol	Min.	Typ.	Max.		
VO	-14.55	-15	-15.45	V	Vin=-23V ~ -30V, Io=1mA ~ 40mA
	-14.55	-15	-15.45		Vin=-17.5V ~ Vmax, Io=1mA ~ 70mA (Note1)
ΔVO (Line Regulation)	-	-	300	mV	Vin=-17.5V ~ -30V, Io=40mA
	-	-	250		Vin=-20V ~ -30V, Io=40mA
ΔVO (Load Regulation)	-	-	150	mV	Vin=-23V, Io=1mA ~ 100mA
	-	-	75		Vin=-23V, Io=1mA ~ 40mA
IQ	-	-	6.0	mA	Tj=25°C, Vin=-23V, Io =40mA
ΔIQ	-	-	1.5	mA	Vin=-20V ~ -30V, Io=40mA
	-	-	0.1		Vin=-23V, Io=1mA ~ 40mA
Vn	-	90	-	uV	f =10Hz ~ 100KHz
RR	34	39	-	db	Vin=-18.5V ~ -28.5V, Io=40mA, f=120Hz
VD	-	1.7	-	V	Tj=25°C

**Electrical Characteristics at Ta=25°C** (Vin=-23, Io=40mA, Tj=25°C, C1=0.33uF, Co=0.1uF unless otherwise specified)

Rank B ( 5% )				Unit	Test Conditions
Symbol	Min.	Typ.	Max.		
VO	-14.25	-15	-15.75	V	Vin=-23V ~ -30V, Io=1mA ~ 40mA
	-14.25	-15	-15.75		Vin=-17.5V ~ Vmax, Io=1mA ~ 70mA (Note1)
ΔVO (Line Regulation)	-	-	300	mV	Vin=-17.5V ~ -30V, Io=40mA
	-	-	250		Vin=-20V ~ -30V, Io=40mA
ΔVO (Load Regulation)	-	-	150	mV	Vin=-23V, Io=1mA ~ 100mA
	-	-	75		Vin=-23V, Io=1mA ~ 40mA
IQ	-	-	6.0	mA	Tj=25°C, Vin=-23V, Io =40mA
ΔIQ	-	-	1.5	mA	Vin=-20V ~ -30V, Io=40mA
	-	-	0.1		Vin=-23V, Io=1mA ~ 40Ma
Vn	-	90	-	uV	f =10Hz ~ 100KHz
RR	34	39	-	db	Vin=-18.5V ~ -28.5V, Io=40mA, f=120Hz
VD	-	1.7	-	V	Tj=25°C

Note: 1. Power dissipation < 0.625W