JY317P Three-terminal adjustable voltage regulator

DESCRIPTION

JY317P series is a high-precision three-terminal adjustable voltage regulator. The output current up to 1.5A.At the same time, the chip integrates a high-precision reference voltage source and output over-current/short-circuit protection circuit and over-temperature protection current, etc. Therefore, it is particularly suitable for applications with stricter requirements.

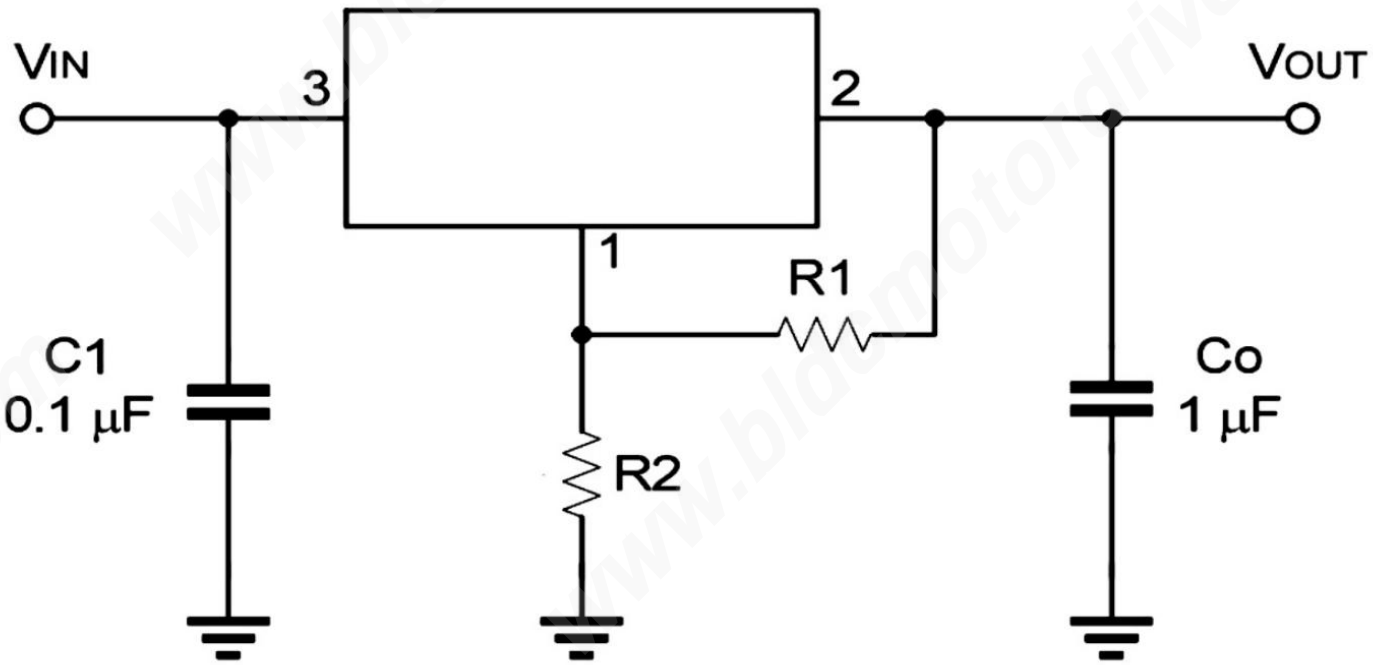
FEATURES

- ●High-precision reference voltage: 1.25V
- ● Maximum voltage difference between input and output: 40V
- ●Low output voltage temperature coefficient
- ● Output Current: 1.5A

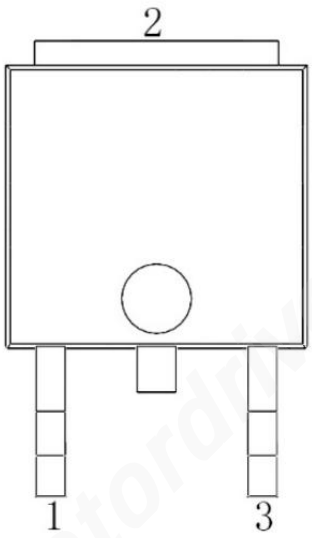
APPLICATION

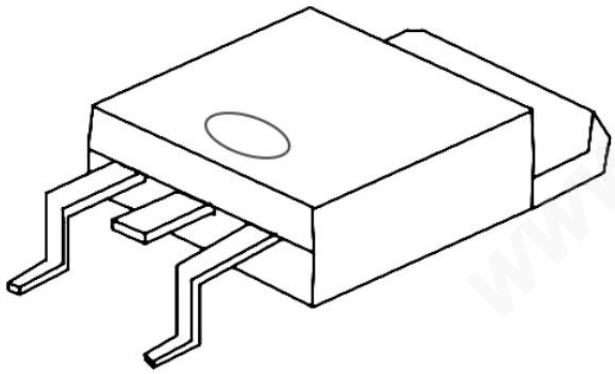
- ● Home appliances
- ● Motor Drivers etc.

TYPICAL APPLICATION CIRCUIT



PACKAGE AND PIN FEATURES





TO-252

Pin Name	Pin No.	Description
V_{ADJ}	1	Reference voltage terminal
V_{OUT}	2	Output
V_{IN}	3	Input

ABSOLUTE MAXIMUM RATING

Description	Limit	Unit
V_{IN}--V_{OUT}	+40	V
Output current range IOUT	1.5	A
Operating Temperature Range	-40-125	℃
Storage Temperature Range	-55-150	℃

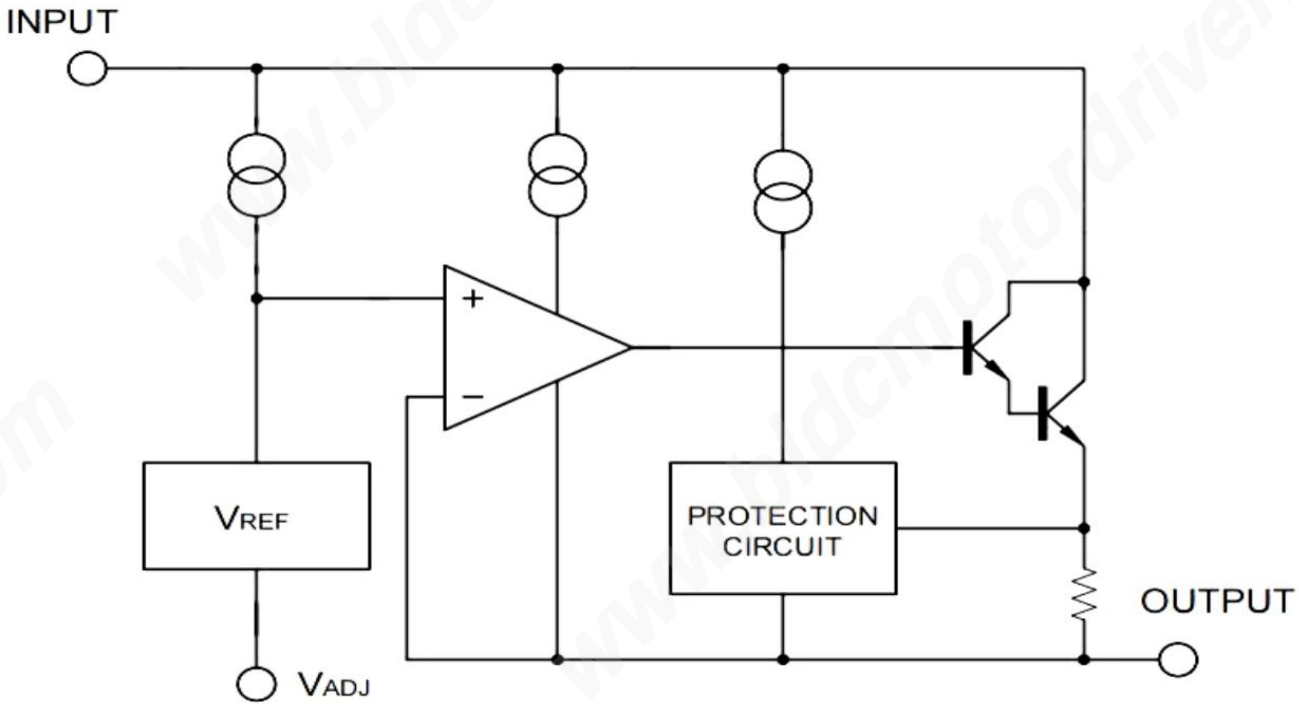
Note: If the parameters exceed the range of "absolute maximum value", it may cause permanent damage to the chip. The above is only the limit range. Under such limit conditions, the technical indicators of the chip will not be guaranteed.Working near the "absolute maximum" for a long time will affect the reliability of the chip

ELECTRICAL CHARACTERISTICS

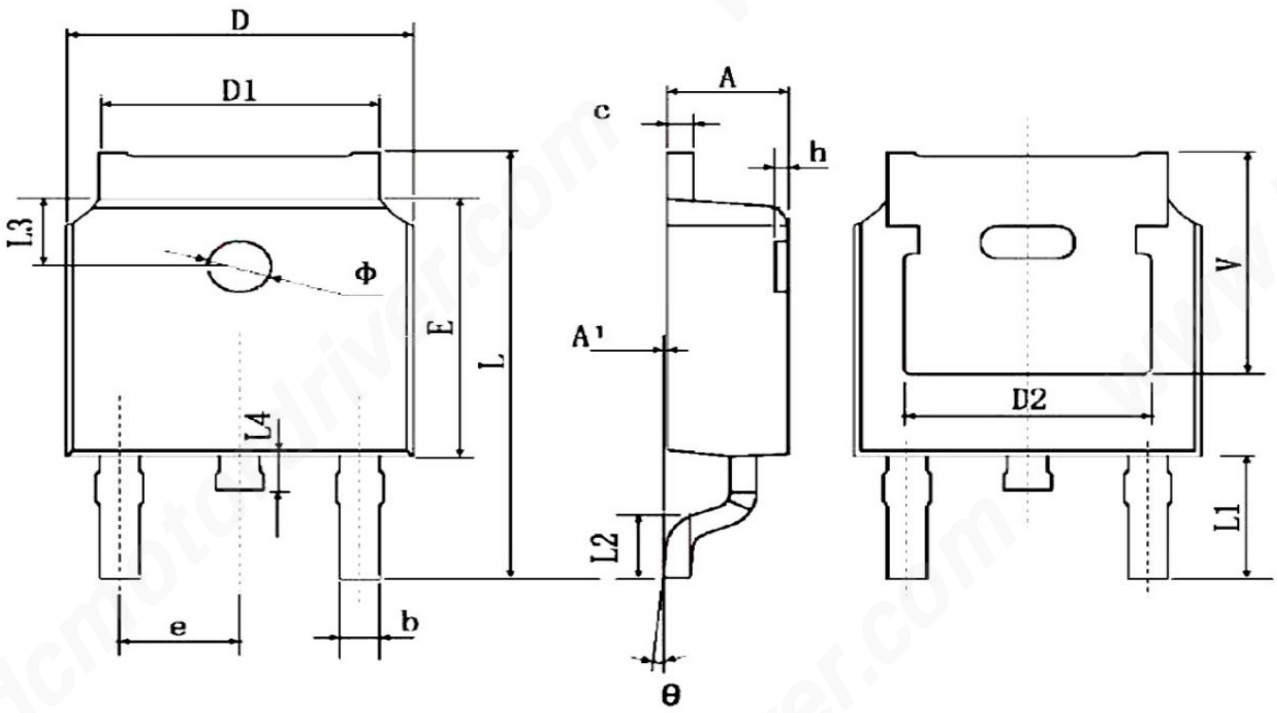
Symbol	Parameter	Testing Conditions	Min.	Typ.	Max.	Unit
I_{ADJ}	Reference voltage terminal current			40	90	uA
V_{ADJ}	Voltage reference	10mA≤IOUT≤1.5A	1.2	1.25	1.3	V
$\Delta V_{OUTLINE}$	line regulation	3V≤VIN-VOUT≤40V		0.01	0.04	%/V
$\Delta V_{OUTLOAD}$	Load Regulation	VOUT≤5V		5	25	mV
		VOUT≥5V			100	
ΔV_{OUTLNE}	Output temperature coefficient	10mA≤IOUT≤1.5A		0.6		mV/℃
I_{OUT}	Output current	VIN-VOUT≤15V	1.5	2		A
RR	Ripple rejection ratio	VOUT=10V CADJ=10uF	65			dB
$V_{OUTNOISE}$	Output noise voltage	BW=10Hz to 10KHz		0.003		%/V

Note: CIN= 0.1uF, COUT= 1uF, TA=25℃

BLOCK DIAGRAM



PACKAGE OUTLINE



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.400	0.087	0.094
A1	0.000	0.127	0.000	0.005
b	0.660	0.860	0.026	0.034
c	0.460	0.580	0.018	0.023
D	6.500	6.700	0.256	0.264
D1	5.100	5.460	0.201	0.215
D2	0.483 TYP.		0.190 TYP.	
E	6.000	6.200	0.236	0.244
e	2.186	2.386	0.086	0.094
L	9.800	10.400	0.386	0.409
L1	2.900 TYP.		0.114 TYP.	
L2	1.400	1.700	0.055	0.067
L3	1.600 TYP.		0.063 TYP.	
L4	0.600	1.000	0.024	0.039
Φ	1.100	1.300	0.043	0.051
θ	0°	8°	0°	8°
h	0.000	0.300	0.000	0.012
V	5.350 TYP.		0.211 TYP.	