

High Voltage Regulator

LM2532A4

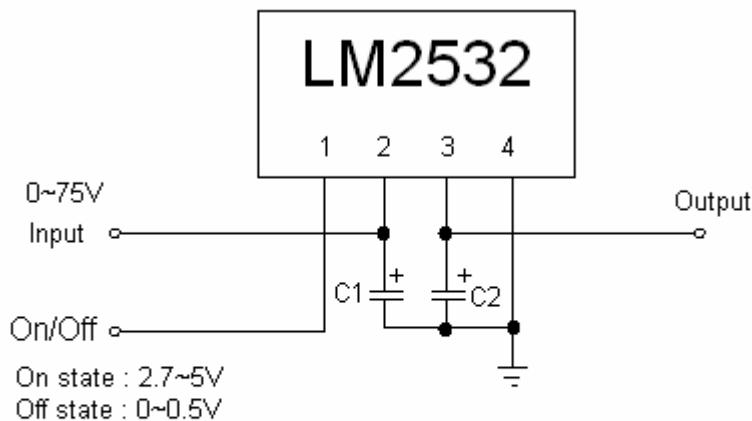
Description

The LM2532A4 series are four-terminal fixed voltage regulators with guaranteed thermal stability over applicable temperature ranges. The output voltage is fixed at 32 volts with $\pm 4\%$ tolerance when the control terminal is at its high level. The control signal is compatible with TTL logic. This makes it very convenient to be used in consumer circuit.

Features

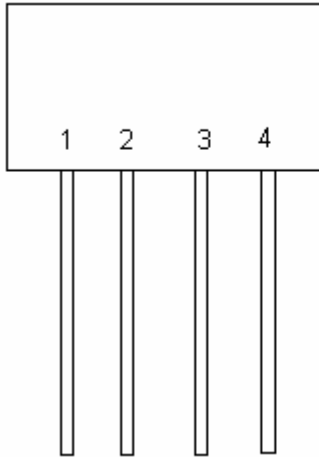
- High input voltage : 40~70V
- Precise output voltage : 32V $\pm 4\%$
- TTL compatible ON/OFF control signal
- Low leakage current at OFF state
- Package: SIP-4L

Typical Application Circuit



C1 : 100V / 22uF
 C2 : 50V / 22uF

Pin Assignment



Pin 1 : On/Off control
Pin 2 : Input Voltage
Pin 3 : Output Voltage
Pin 4 : Ground

Absolute Maximum Ratings

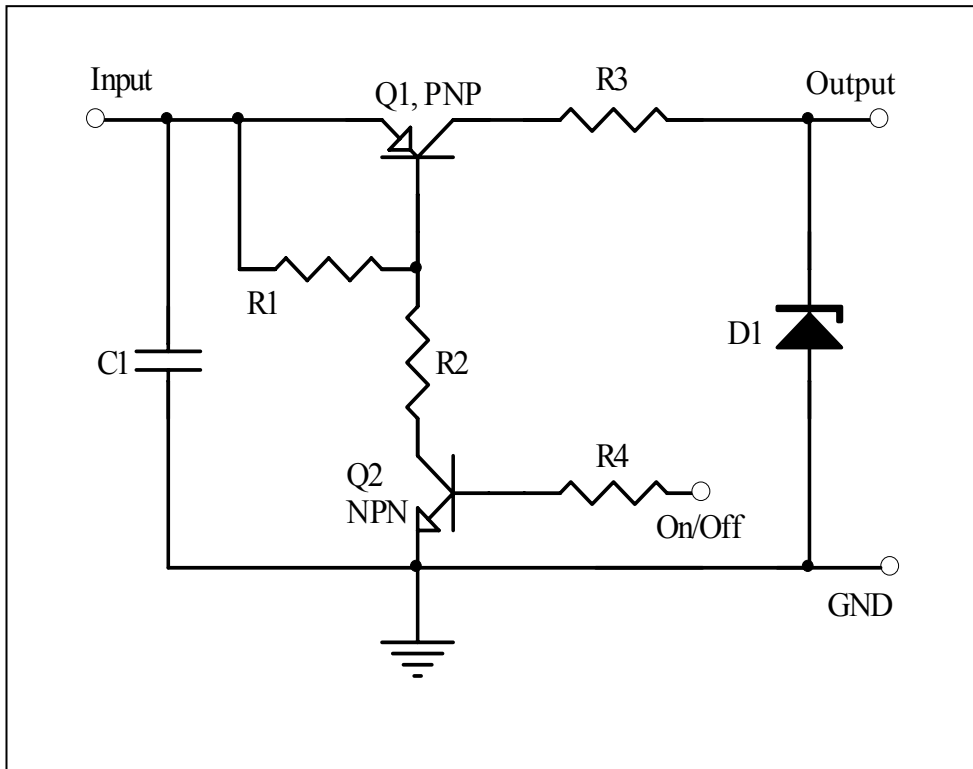
(Operating temperature range applies unless otherwise specified)

Characteristics	Symbol	Value	Unit
Input Voltage	V_{IN}	+40~+70	V
Operating Current	I_{OPR}	10	mA
Control Voltage	V_{CTR}	6	V
Control Current	I_{CTR}	0.2	mA
Power Dissipation	P_D	400	mW
Operating Temperature Range	T_{opr}	-40~+120	°C
Storage Temperature Range	T_{stg}	-65~+150	°C

Electrical Characteristics (Ta=25°C unless otherwise specified)

Characteristics	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V _O	V _{IN} =40~70V, I _O =1~5mA, V _{CTR} =2.5~5.0V	30.72	32	33.28	V
Output Voltage	V _O	V _{IN} =45~70V, I _O =1~10mA, V _{CTR} =2.5~5.0V	30.72	32	33.28	V
Output Voltage	V _O	V _{IN} =40~75V, I _O =1~10mA, V _{CTR} =0~0.5V	-	-	0.5	V
Operating Current with regulation	I _{OPR}	V _{IN} =40~75V, V _{CTR} =2.7~5.0V	-	-	5	mA
Off-State Output Current	I _{O(off)}	V _{IN} =40~75V, V _{CTR} =0.5V	-	0.1	1.0	μA
Minimum input voltage for regulation	V _{min}		40	-	-	V

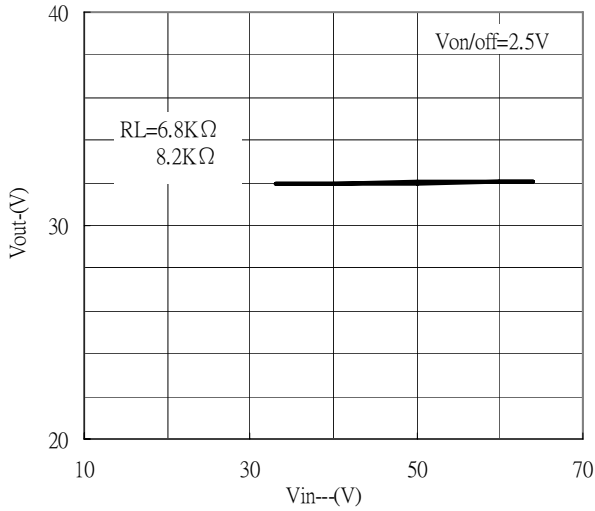
Schematic Diagram



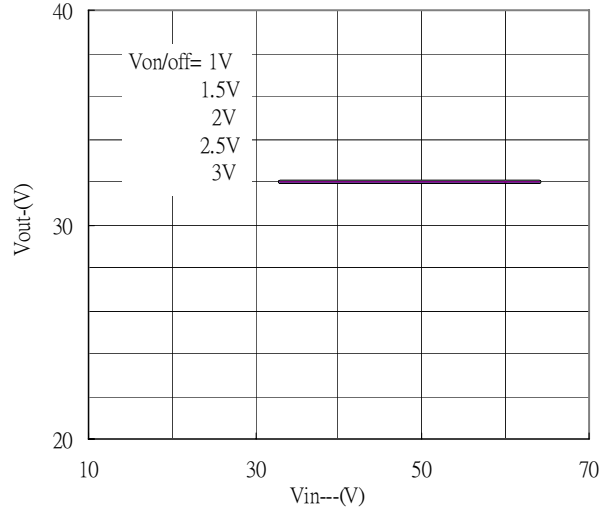


Characteristic Curves

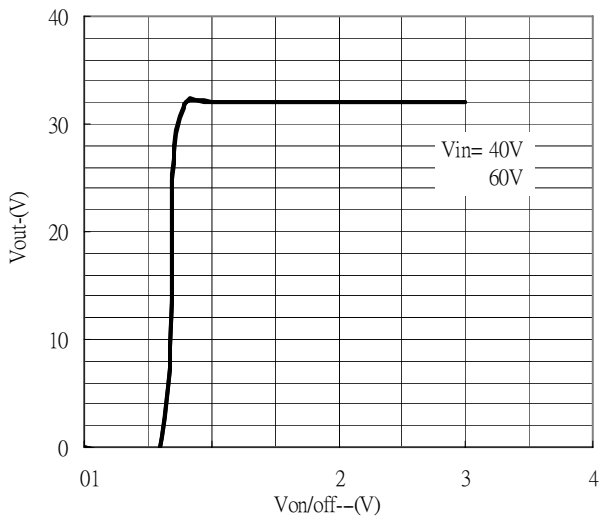
Vin vs Vout



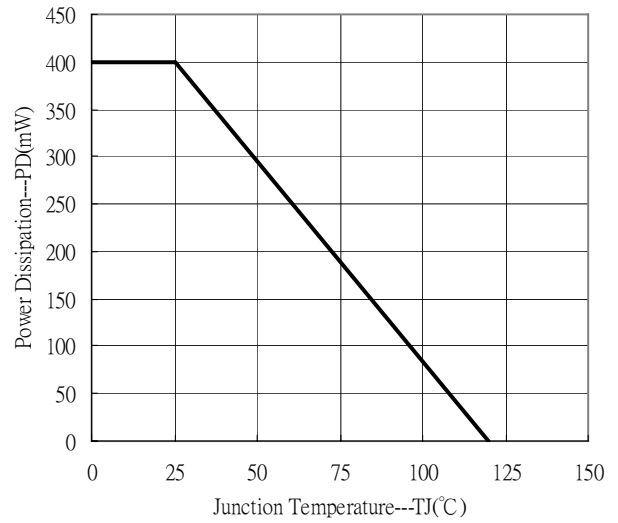
Vin vs Vout



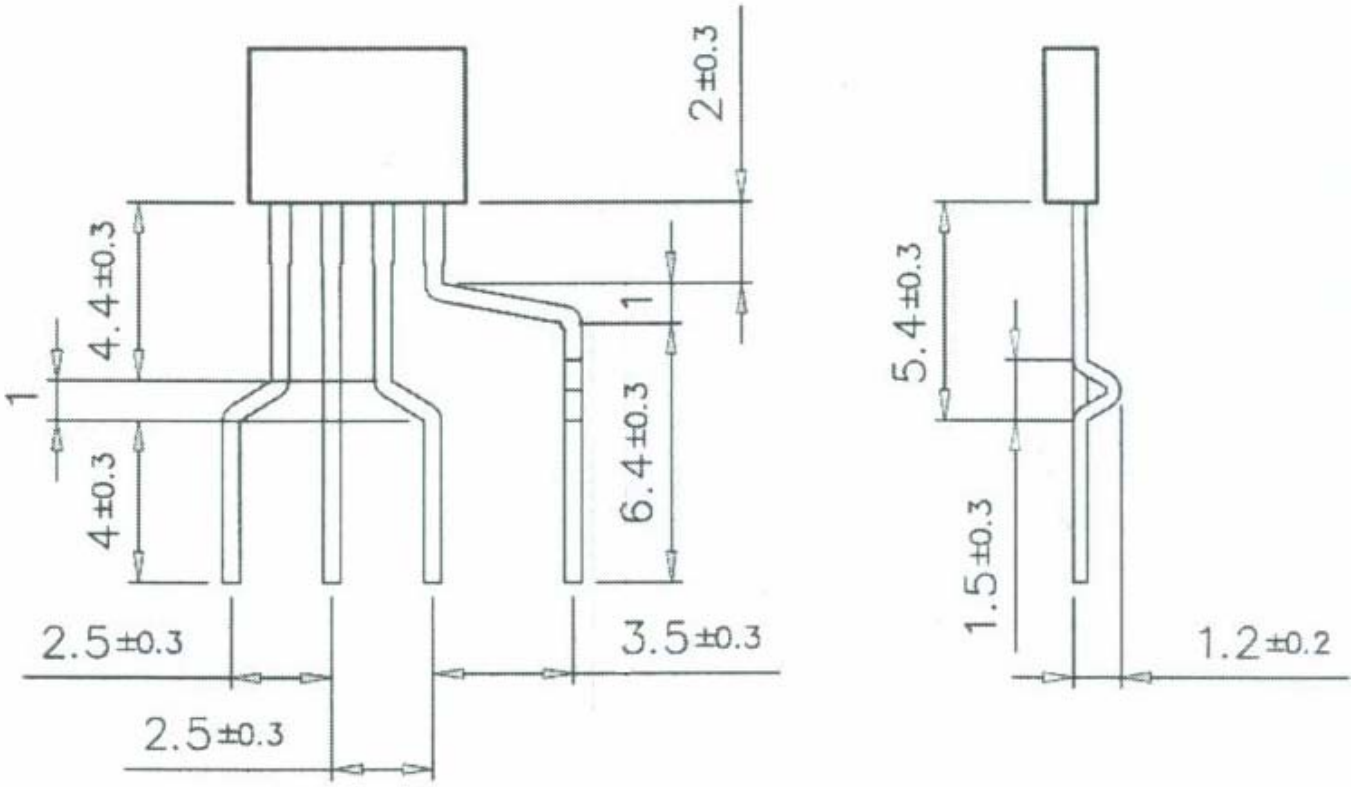
Von/off vs Vout



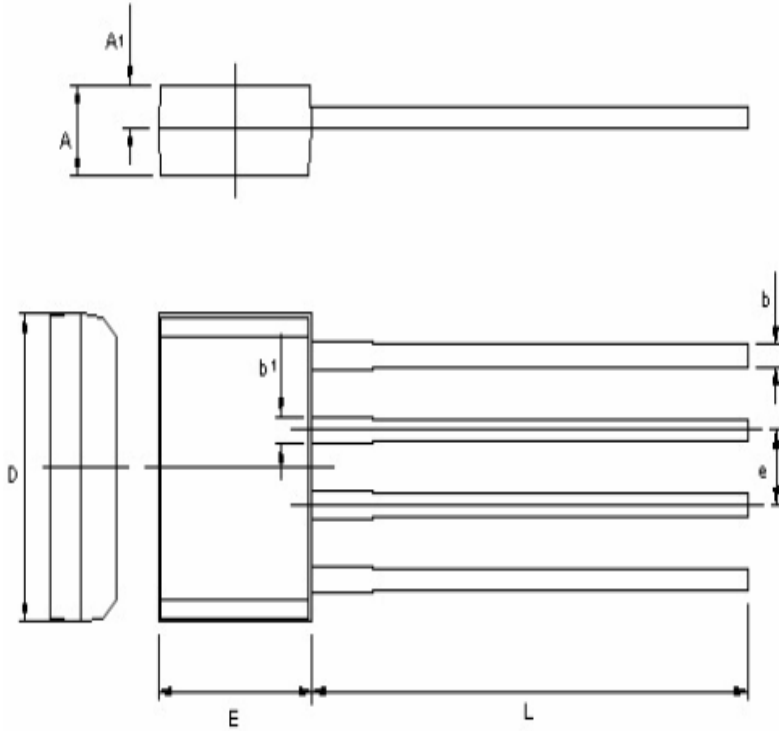
Power Derating Curve



Outline Dimension

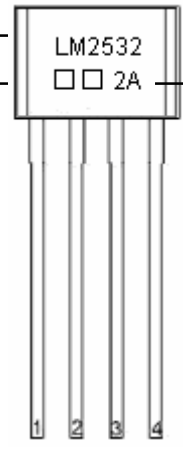


SIP-4L Dimension



The diagram shows three views of the 4-lead SIP-4L Plastic Package. The top view shows dimensions A and A1. The side view shows dimensions D, b, b1, e, and L. The bottom view shows dimension E. The package has four leads labeled 1, 2, 3, and 4.

Marking:



Device name ← LM2532
 ← □ □ 2A → Control Code

Date Code:
 Year+Month
 Year: 2007→7
 2008→8, ..., etc
 Month : Jan→1, Feb→2, Mar→3, Apr→4, May→5, Jun→6, Jul→7, Aug→8, Sep→9, Oct→A, Nov→B, Dec→C

Style: Pin 1.On/Off 2.Input 3.Output 4. Ground

4-Lead SIP-4L Plastic Package
 CYStek Package Code: A4

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.051	0.071	1.295	1.803	D	0.201	0.211	5.105	5.359
A1	0.024	-	0.610	-	E	0.139	0.149	3.531	3.785
b	0.013	0.017	0.330	0.432	L	0.551	0.630	14.00	16.00
b1	0.016	0.020	0.406	0.508	e	0.05 REF		1.27 REF	

Notes: 1.Controlling dimension: millimeters.
 2.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
 3 If there is any question with packing specification or packing method, please contact your local CYStek sales office.

Material:

- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0

Important Notice:

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of CYStek.
- CYStek reserves the right to make changes to its products without notice.
- CYStek **semiconductor products are not warranted to be suitable for use in Life-Support Applications, or systems.**
- CYStek assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.