

High Voltage Regulator

LM2532A4

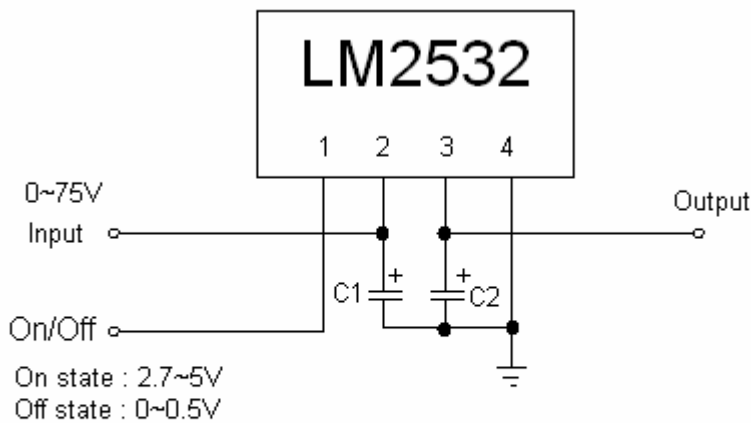
Description

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

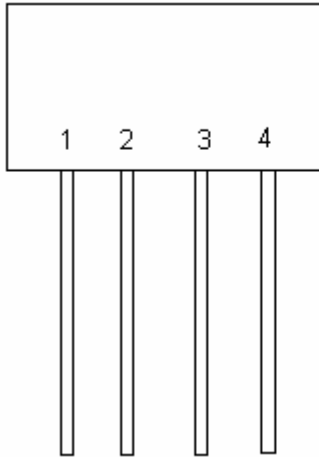
- High input voltage : 40~70V
- Precise output voltage : 32V $\pm 4\%$
- TTL compatible ON/OFF control signal
- Low leakage current at OFF state
- Package: SIP-4L

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

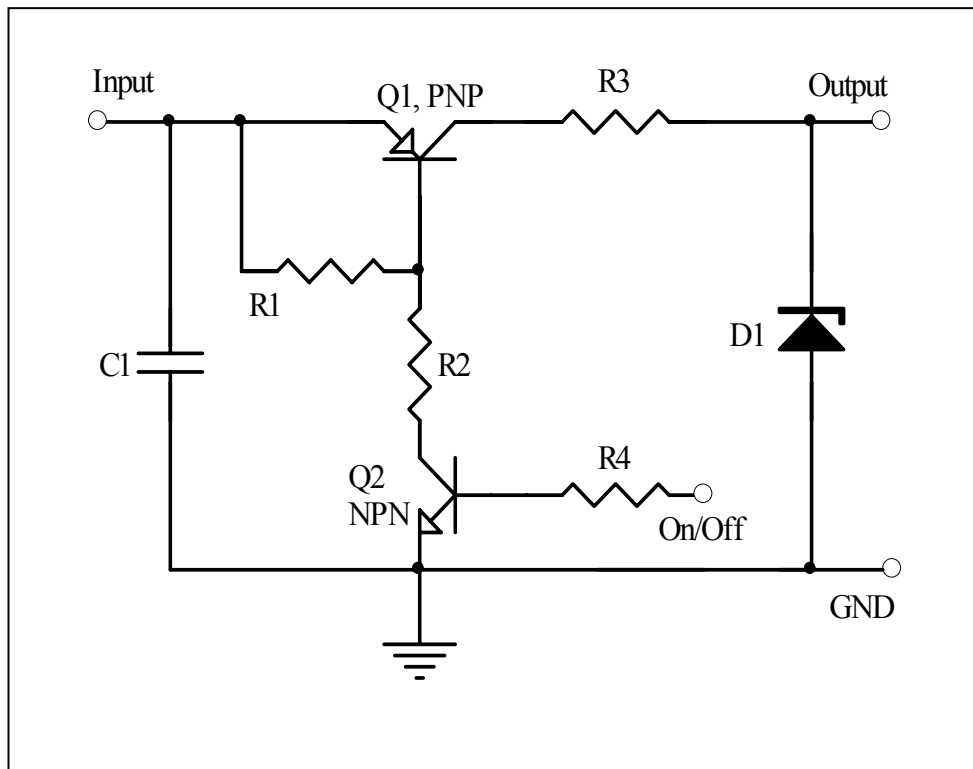
(Operating temperature range applies unless otherwise specified)

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 ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

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

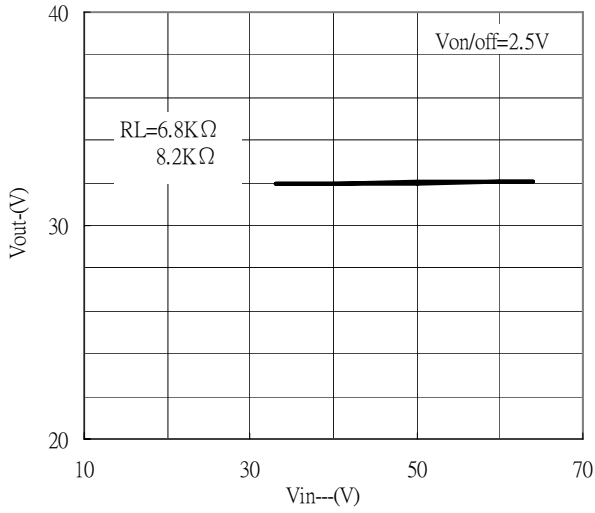
Schematic Diagram



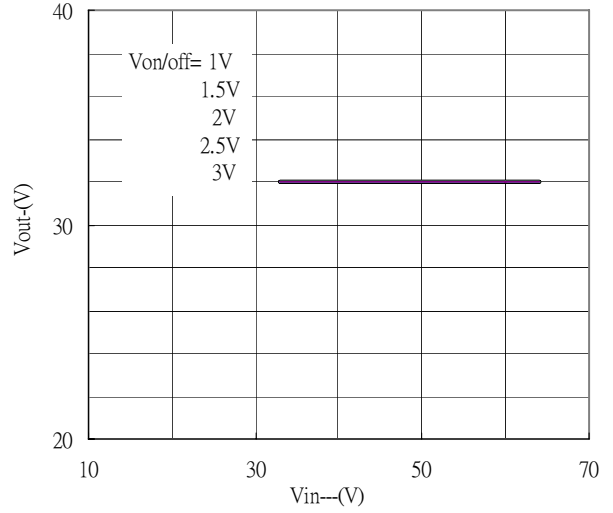


Characteristic Curves

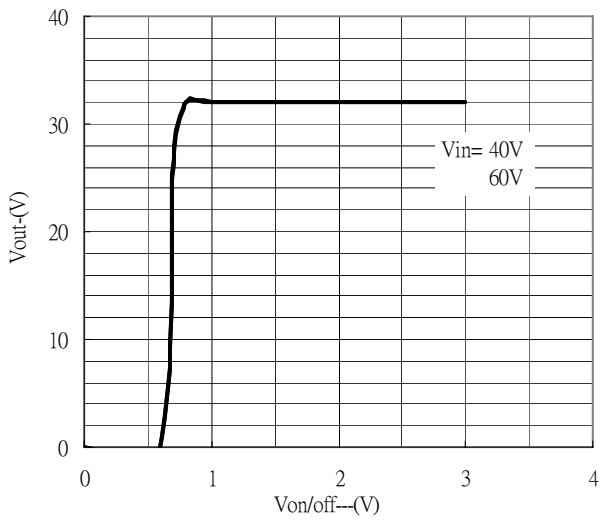
Vin vs Vout



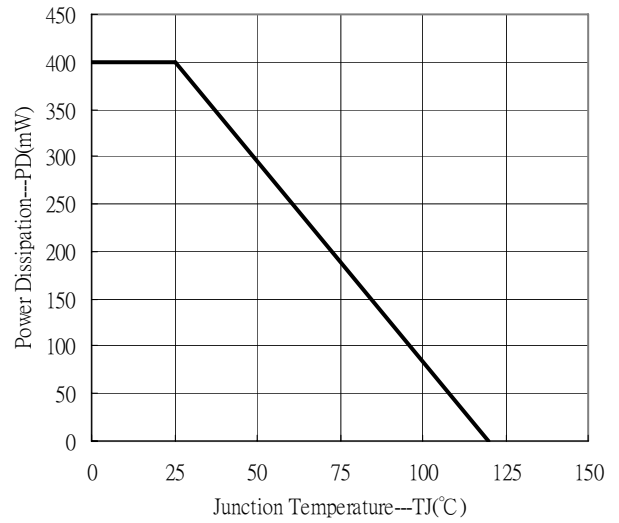
Vin vs Vout



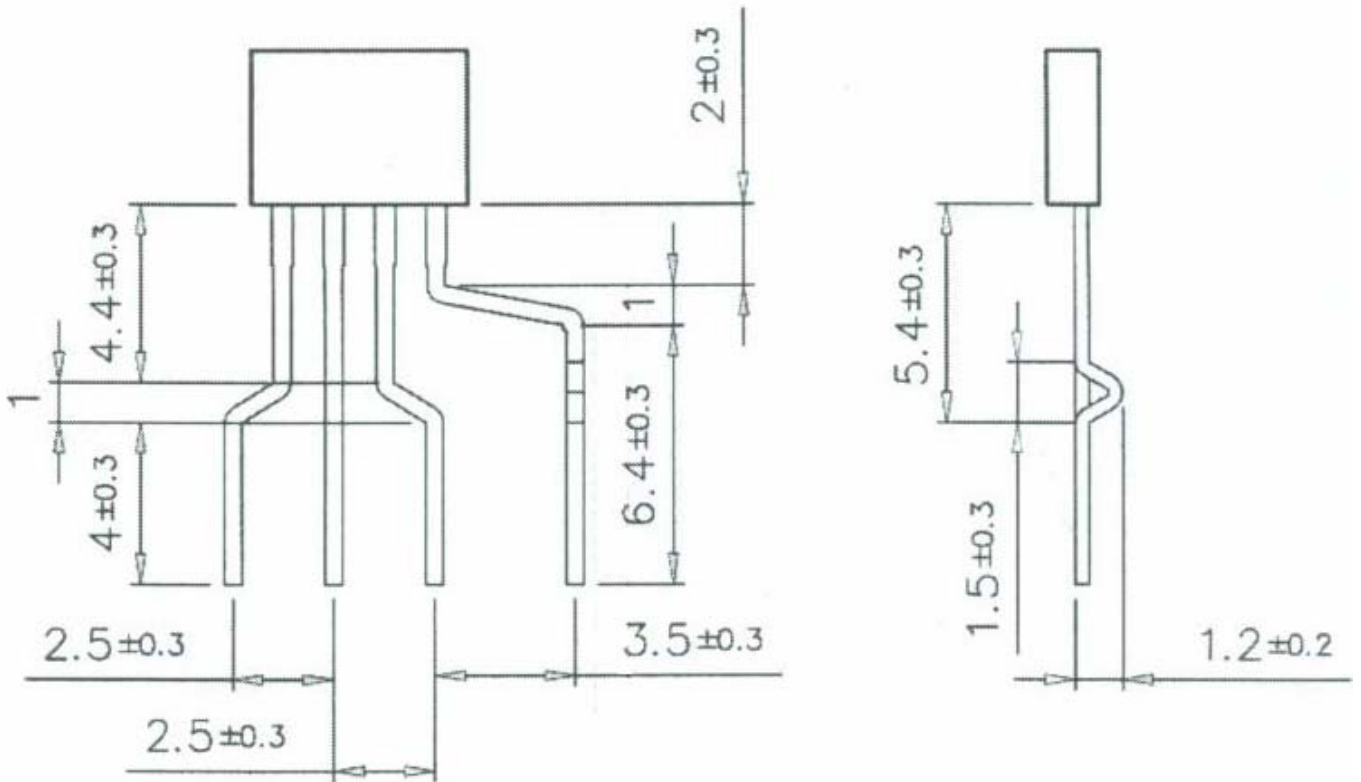
Von/off vs Vout



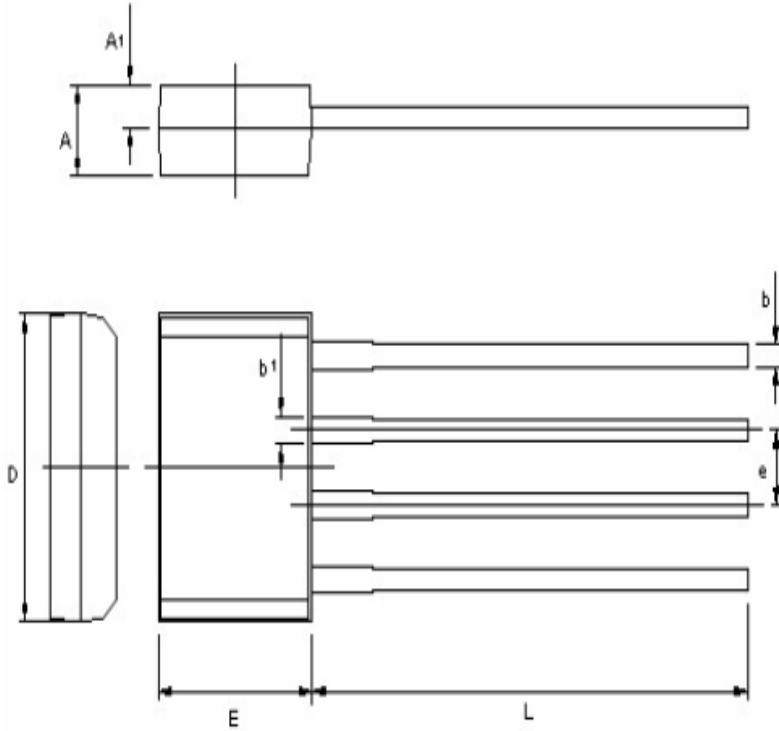
Power Derating Curve



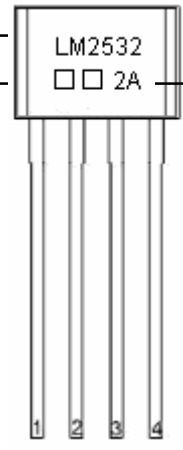
Outline Dimension



SIP-4L Dimension



Marking:



Device name ← LM2532
 Control Code ← □ □ 2A

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

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