

# DATA SHEET

Part No.	<b>AN80T54</b>
Package Code No.	HSIP012-P-0000A

Maintenance/Discontinued includes following lifecycle stage.  
planned maintenance type  
maintenance type  
planned discontinued type  
discontinued type  
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# AN80T54

## Multi voltage regulator IC

### ■ Features

- 5 outputs voltage regulator
- Peak current protection circuit
- Thermal protection circuit

### ■ Applications

- For power supply

### ■ Package

- SIL-12 pins plastic package (power type with fin)

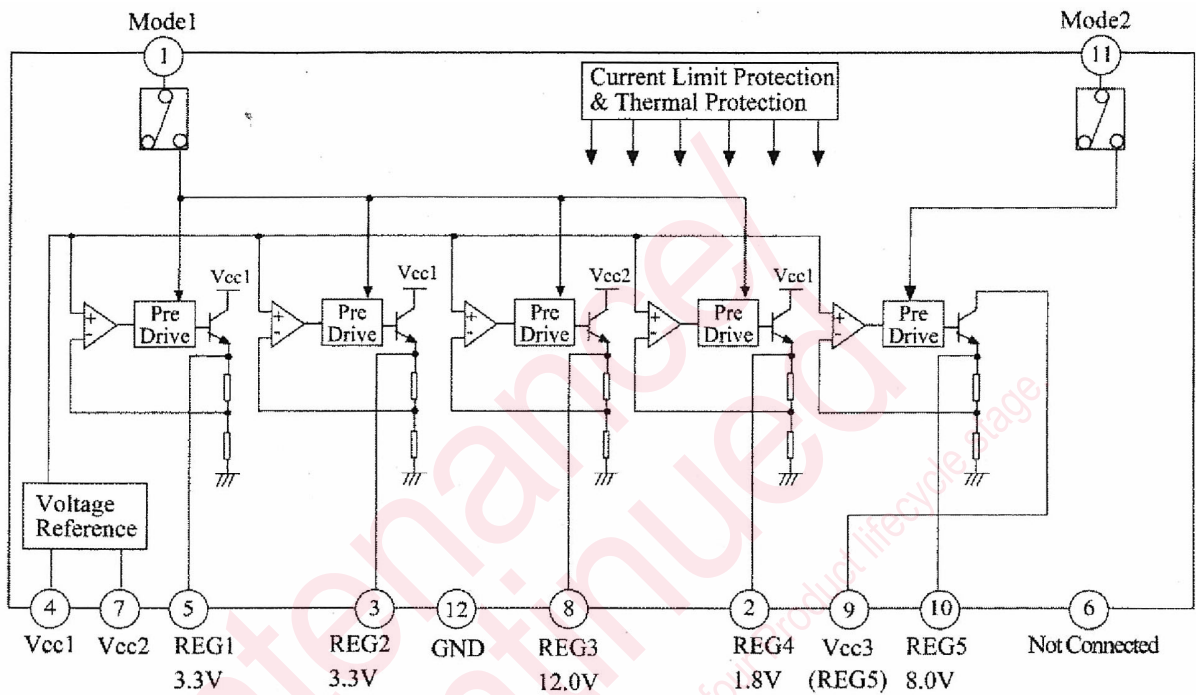
### ■ Type

- Silicon monolithic bipolar IC

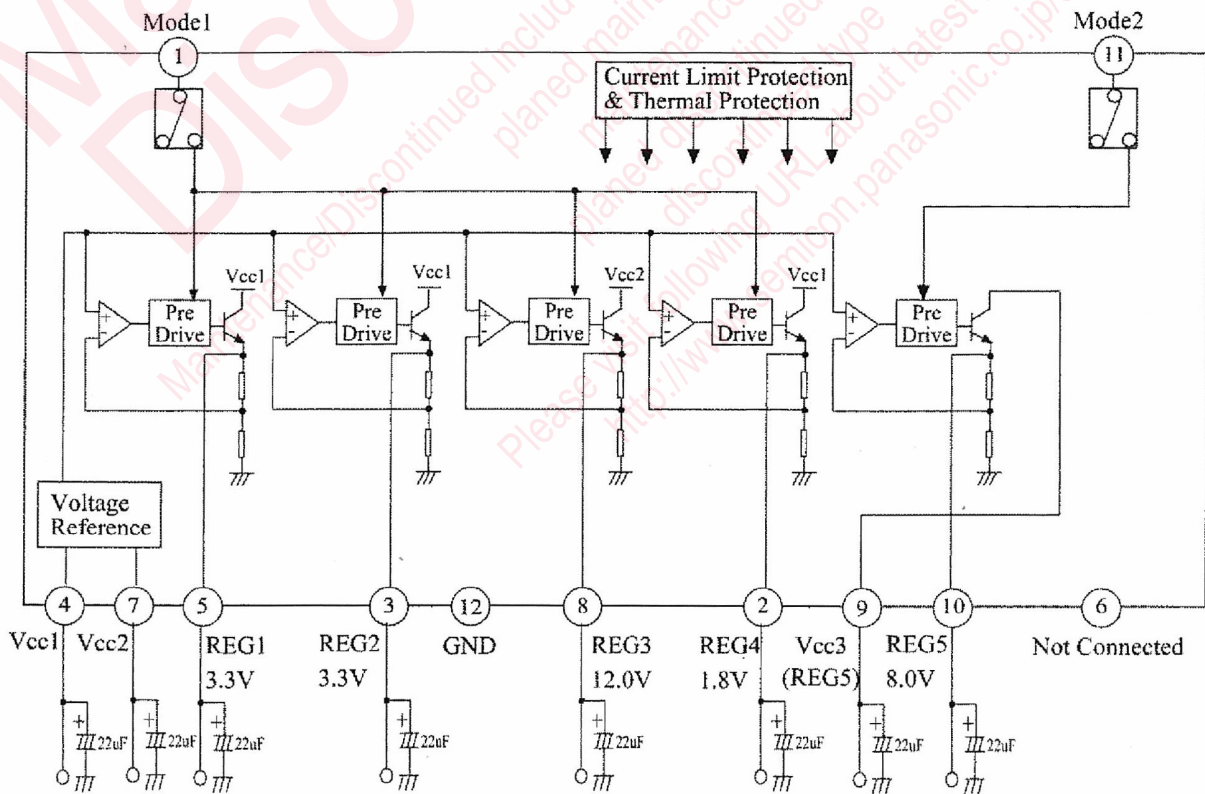
Maintenance/Discontinued

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■ Block Diagram



■ Application Circuit Example



### ■ Pin Descriptions

Pin No.	Pin name	Description
1	MODE1	When MODE1 = 5 V, REG1, REG2, REG3 and REG4 outputs are "H".
2	REG4	When MODE1 pin is "H". REG4 output is 1.8 V ( $I_O = 500$ mA min.).
3	REG2	When MODE1 pin is "H". REG2 output is 3.3 V ( $I_O = 600$ mA min.).
4	VCC1	Connected to power supply.
5	REG1	When MODE1 pin is "H". REG1 output is 3.3 V ( $I_O = 600$ mA min.).
6	Not Connected	
7	VCC2	Connected to power supply.
8	REG3	When MODE1 pin is "H". REG3 output is 12.0 V ( $I_O = 150$ mA min.).
9	VCC3 (REG5)	Connected to power supply.
10	REG5	When MODE2 pin is "H". REG5 output is 8.0 V ( $I_O = 300$ mA min.).
11	MODE2	When MODE2 = 5 V, REG5 output is "H".
12	GND	Connected to the IC substrate.

### ■ Absolute Maximum Ratings

A No.	Parameter	Symbol	Rating	Unit	Note
1	Storage temperature	$T_{stg}$	-55 to +150	°C	*1
2	Operating ambient temperature	$T_{opr}$	-25 to +75	°C	*1
3	Operating ambient pressure	$P_{opr}$	$1.013 \times 10^5 \pm 0.61 \times 10^5$	Pa	
4	Operating constant acceleration	$G_{opr}$	9 810	m/S <sup>2</sup>	
5	Operating shock	$S_{opr}$	4 900	m/S <sup>2</sup>	
6	Supply voltage	$V_{CC1}$	20.0	V	
		$V_{CC2}$	20.0		
		$V_{CC3}$	20.0		
7	Supply current	$I_{CC}$	6	A	*2
8	Power dissipation	$P_D$	12.5	W	*3
9	REG1 maximum current	$I_{max1}$	2.8	A	
10	REG2 maximum current	$I_{max2}$	2.8	A	
11	REG3 maximum current	$I_{max3}$	0.7	A	
12	REG4 maximum current	$I_{max4}$	2.8	A	
13	REG5 maximum current	$I_{max5}$	2.8	A	

Note ) \*1: Except these items, all other measurements are taken at  $T_a = 25^\circ\text{C}$ .

\*2: Current limiting circuit.

\*3:  $T_a = 75^\circ\text{C}$  with 4.0°C/W heat sink attached at fin.

### ■ Operating Supply Voltage Range

Parameter	Symbol	Range	Unit	Note
Operating supply voltage range	$V_{CC1}$	3.7 to 7.0	V	
	$V_{CC2}$	13.5 to 17.0		
	$V_{CC3}$	11.0 to 17.0		

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