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DATA SHEET

Part No.	AN80T53
Package Code No.	HZIP007-P-0750A

Contents

AN80T53

Multi voltage regulator IC

■ Features

- 4 outputs voltage regulator
- Peak current protection circuit
- Thermal protection circuit
- Load short protection circuit

■ Applications

- For power supply

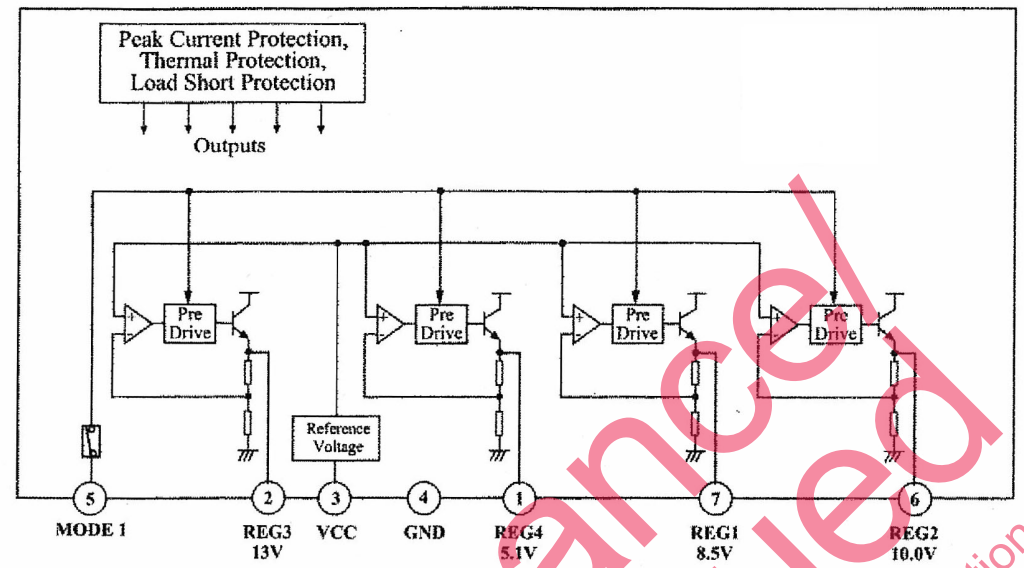
■ Package

- TO-220 7 pins plastic package (power type with fin)

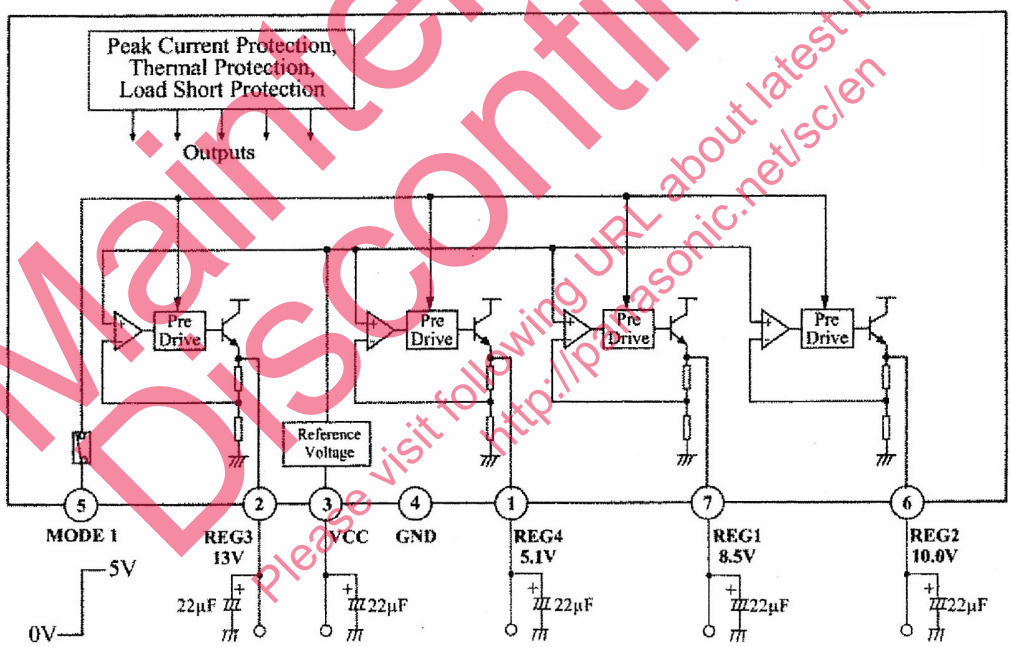
■ Type

- Silicon monolithic bipolar IC

■ Block Diagram



■ Application Circuit Example



MODE 1 = 0V	REG1, REG2, REG3 & REG4 OFF
MODE 1 = 5V	REG1, REG2, REG3 & REG4 ON

Note) 1. To prevent oscillation at each output, make sure to connect a capacitor having a capacitance of 22 µF or greater between GND and each of the REG1 (pin 5), REG2 (pin 7), REG3 (pin 3) and V_{CC} (pin 6) pins. We recommend using a tantalum electrolytic capacitor whose capacitance is unsusceptible to temperature.

2. When supplied a V_{CC} of 21 V or greater, IC may be damaged if REG2 or REG3 outputs are shorted to GND.

3. When supplied a V_{CC} of 21 V or greater, IC may be damaged if REG2 or REG3 outputs are load short.

■ Pin Descriptions

Pin No.	Pin name	Description
1	REG4 Output	5.1 V power supply with a minimum peak output current of 1 200 mA
2	REG3 Output	13 V power supply with a minimum peak output current of 1 350 mA
3	VCC	Connected to power supply.
4	GND	Connected to the IC substrate.
5	MODE1	REG1, REG2, REG3 and REG4 outputs are turned ON when this pin is 5 V.
6	REG2 Output	10 V power supply with a minimum peak output current of 800 mA
7	REG1 Output	8.5 V power supply with a minimum peak output current of 700 mA

■ 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}	−30 to +85	°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^2	
5	Operating shock	S_{opr}	4 900	m/S^2	
6	Power supply voltage	V_{CC}	30.0	V	
7	Power supply current	I_{CC}	3.0	A	*2
8	Power dissipation	P_D	13	W	*3

Note) *1: Except these items, all other measurements are taken at T_a = 25°C.
*2: Over current limiting circuit built-in.
*3: T_a = 85°C infinite heat sink.

■ Operating Supply Voltage Range

Parameter	Symbol	Range	Unit	Note
Operating supply voltage range	V_{CC}	15.0 to 30.0	V	*

Note) *: Minimum peak output current is not guaranteed at V_{CC} = 24 V to 30 V

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