

# ILA8137

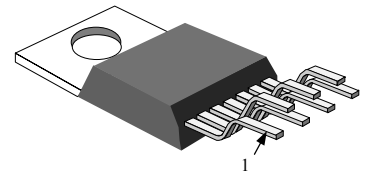
## +5.1 V +5.1 V REGULATOR WITH DISABLE AND RESET

The ILA8137A is a monolithic dual positive voltage regulator designed to provide fixed precision output voltages of 5.1V at current up to 0,75 A.

An internal reset circuit generates a reset pulse when the output 1 decreases below the regulated voltage value.

Output 2 can be disabled by TTL input .

Short circuit and thermal protections are included in ILA8137

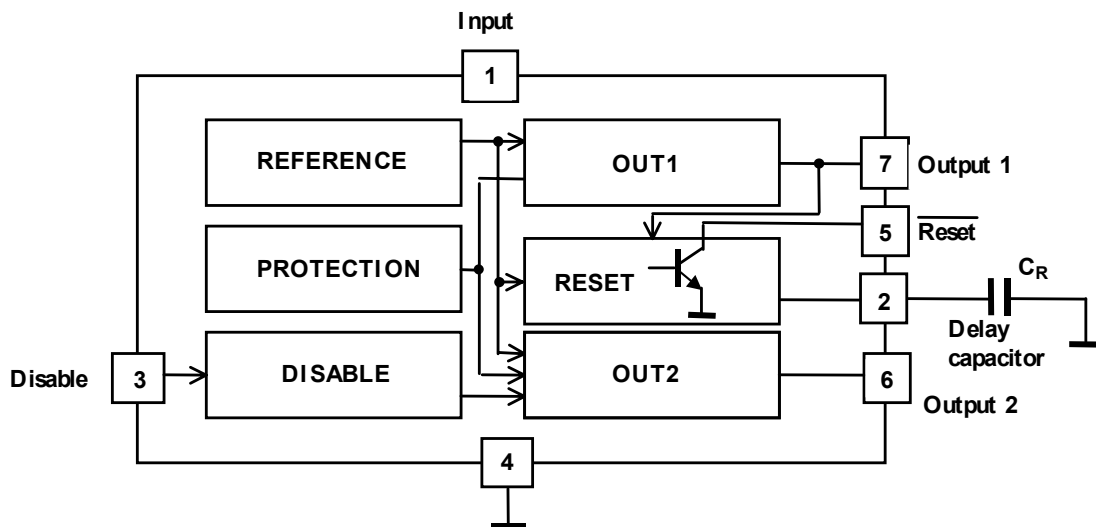


Heptawatt

- 1 - Input 1
- 2 - Input 2
- 3 - Disable
- 4 - Ground
- 5 - N. c.
- 6 - Output 2
- 7 - Output 1

- Output Currents up to 1 A
- Fixed precision output voltage  $5.1\text{ V} \pm 2\%$
- Output 1 with reset facility
- Output 2 With Disable by TTL input
- Shot-circuit protection at both outputs
- Thermal protection
- Lowdrop output voltage
- Available also in heptawatt package

### BLOCK DIAGRAM



### ABSOLUTE MAXIMUM RATINGS

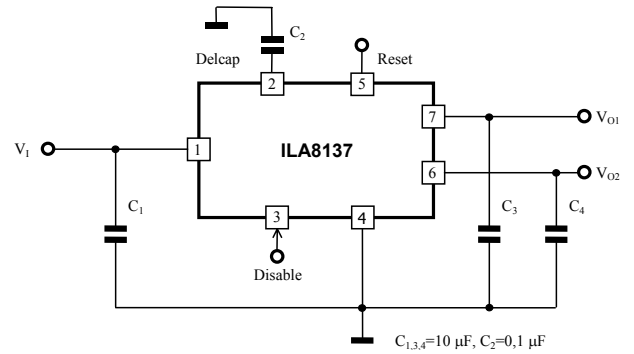
Parameter	Symbol	Value	Unit
DC Input Voltage Pin 1	$V_I$	20	V
Disable Input Voltage	$V_{DIS}$	20	V
Output Voltage at Pin 5	$V_{RST}$	20	V
Storage Temperature	$T_{stg}$	-65 to +150	°C
Junction Temperature	$T_J$	0 to +150	°C

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## THERMAL DATA

Parameter	Symbol	Value	Unit
Maximum Thermal Resistance Junction-Case for Heptawatt	$R_{th(j-c)}$	6	$^{\circ}\text{C}/\text{W}$
Maximum Recommended Junction Temperature	$T_J$	130	$^{\circ}\text{C}$

## TYPICAL APPLICATION



## ELECTRICAL CHARACTERISTICS

( $V_I = 7\text{V}$ ,  $T_J = +25^{\circ}\text{C}$ , unless otherwise specified)

Parameter	Symbol	Min	Max	Unit
Output Voltage $I_{O1,2} = 10\text{ mA}$	$V_{O1,2}$	5	5.2	V
Output Voltage $7\text{ V} < V_I < 14\text{ V}$ $5\text{ mA} < I_{O1,2} < 750\text{ mA}$	$V_{O1,2}$	4.9	5.3	V
Dropout Voltage $I_{O1,2} = 750\text{ mA}$ $I_{O1,2} = 1\text{ A}$	$V_{IO1,2}$ $V_{IO1,2}$	-	1.4 2	V V
Line Regulation $7\text{ V} < V_I < 14\text{ V}$ , $I_{O1,2} = 200\text{ mA}$	$\Delta U_{O1,2LI}$	-	50	mV
Load Regulation $5\text{ mA} < I_{O1,2} < 0.6\text{ A}$	$\Delta U_{O1,2LO}$	-	100	mV
Quiescent Current $I_{O1} = 10\text{ mA}$ , Output 2 Disabled	$I_Q$	-	2.0	mA
Reset Threshold Voltage ( $K = V_{O1}$ )	$V_{O1RST}$	K-0.4	K-0.1	V
Reset Threshold Hysteresis	$V_{RSH}$	20	75	V
Saturation Voltage in Reset Condition $I_5 = 5\text{ mA}$	$V_{RL}$	-	0.4	V
Leakage Current in Normal Condition at Pin 5 $V_5 = 10\text{ V}$	$I_{RH}$	-	10	$\mu\text{A}$
Short Circuit Output Current $V_I = 7\text{ V}$ $V_I = 16\text{ V}$	$I_{O1,2SC}$ $I_{O1,2SC}$	-	1.6 1	A A
Disable Voltage High (out 2 active)	$V_{DISH}$	2	-	V
Disable Voltage Low (out 2 disable)	$V_{DISL}$	-	0.8	V
Disable Bias Current $0\text{V} < V_{DIS} < 7\text{V}$	$I_{DIS}$	-100	2	$\mu\text{A}$