

ILA8133A

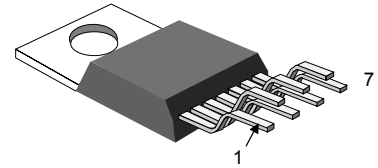
+5.1V +8V REGULATOR WITH DISABLE

The ILA8133A is a monolithic dual positive voltage regulator designed to provide fixed precision output voltages of 5.1 V and 8 V at current up to 0.75 A.

Output 2 can be disabled by TTL input .

Short circuit and thermal protections are included in ILA8133A

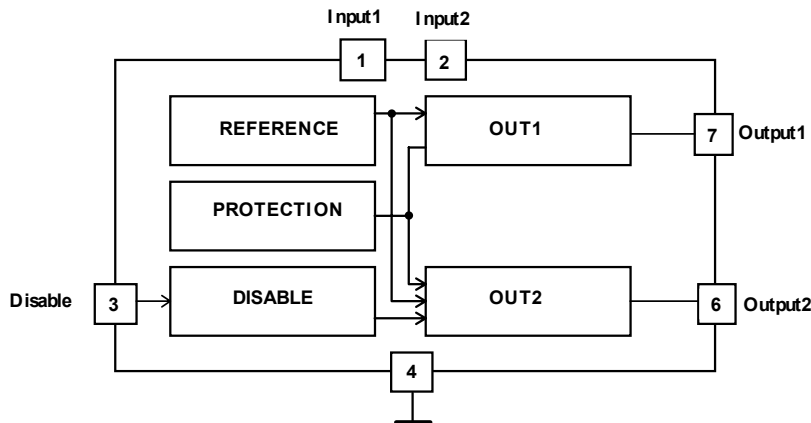
- Output Currents up to 1 A
- Fixed precision output 1 voltage $5.1\text{ V} \pm 2\%$
- Fixed precision output 2 voltage $8\text{ V} \pm 2\%$
- Output 2 With Disable by TTL input
- Shot-circuit protection at both outputs
- Thermal protection
- Lowdrop output voltage
- Available also in heptawatt package



Heptawatt

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

BLOCK DIAGRAM



ABSOLUTE MAXIMUM RATINGS

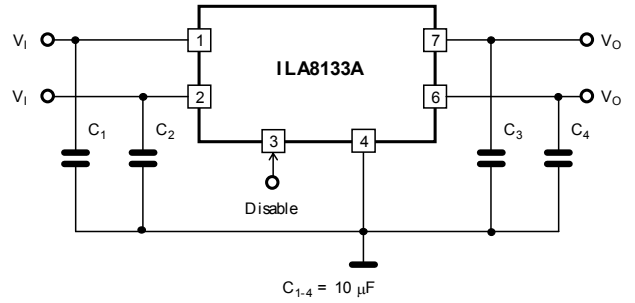
Parameter	Symbol	Value	Unit
DC Input Voltage Pin 1, Pin 2	$V_{I1,2}$	20	V
Disable Input Voltage	V_{DIS}	20	V
Storage Temperature	T_{stg}	-65 to +150	°C
Junction Temperature	T_J	0 to +150	°C

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THERMAL DATA

TYPICAL APPLICATION

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



ELECTRICAL CHARACTERISTICS

($V_{I1} = 7\text{V}$, $V_{I2} = 10\text{V}$, $T_J = +25^{\circ}\text{C}$, unless otherwise specified)

Parameter	Symbol	Min	Max	Unit
Output Voltage $I_{O1} = 10 \text{ mA}$	V_{O1}	5	5.2	V
Output Voltage $I_{O2} = 10 \text{ mA}$	V_{O2}	7.84	8.16	V
Output Voltage $7 \text{ V} < V_{I1} < 14 \text{ V}$ $5 \text{ mA} < I_{O1,2} < 750 \text{ mA}$	V_{O1}	4.9	5.3	V
Output Voltage $10 \text{ V} < V_{I2} < 14 \text{ V}$ $5 \text{ mA} < I_{O1,2} < 750 \text{ mA}$	V_{O2}	7.7	8.3	V
Dropout Voltage $I_{O1,2} = 750 \text{ mA}$ $I_{O1,2} = 1 \text{ A}$	$V_{IO1,2}$	-	1.4 2	V V
Line Regulation $I_{O1,2} = 200 \text{ mA}$ $7 \text{ V} < V_{I1} < 14 \text{ V}$ $10 \text{ V} < V_{I2} < 14 \text{ V}$	ΔU_{O1LI} ΔU_{O2LI}	-	50 80	mV mV
Load Regulation $5 \text{ mA} < I_{O1} < 0.6 \text{ A}$ $5 \text{ mA} < I_{O2} < 0.6 \text{ A}$	ΔU_{O1LO} ΔU_{O2LO}	-	100 160	mV mV
Quiescent Current $I_{O1} = 10 \text{ mA}$ Output 2 Disabled	I_Q	-	2.0	mA
Short Circuit Output Current $V_{I1} = 7 \text{ V}$, $V_{I2} = 10 \text{ V}$ $V_{I1,2} = 16 \text{ V}$	$I_{O1,2SC}$ $I_{O1,2SC}$	-	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	μA