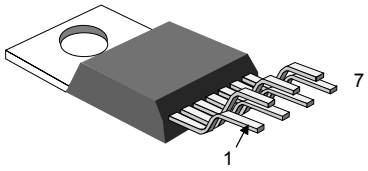
ILA8133A

+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

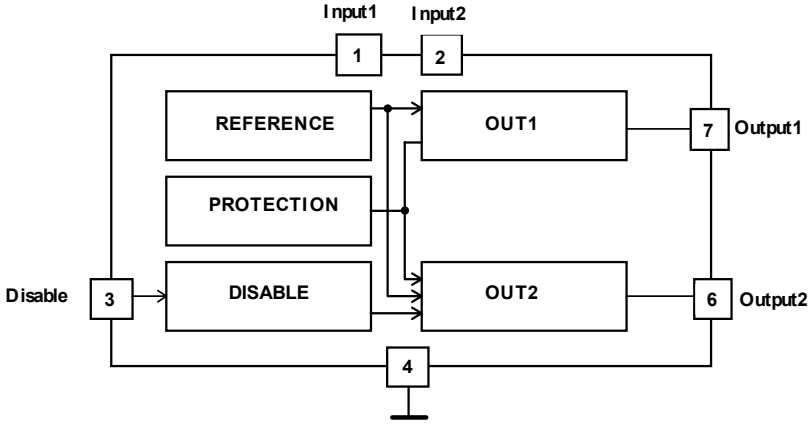
- Output Currents up to 1 A
- Fixed precision output 1 voltage 5.1 V ± 2%
- Fixed precision output 2 voltage 8 V ± 2%
- Output 2 With Disable by TTL input
- Shot-circuit protection at both outputs
- Thermal protection
- Lowdrop output voltage
- Available also in heptawatt package



Heptawat

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

BLOCK DIAGRAM



ABSOLUTE MAXIMUM RATINGS

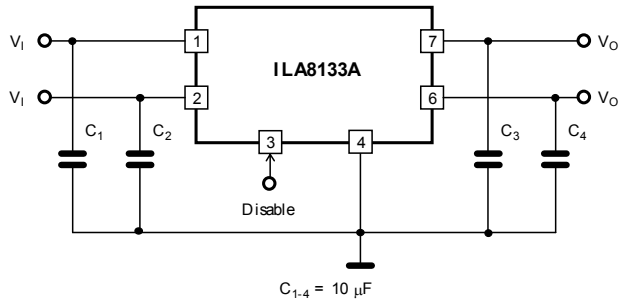
Parameter	Symbol	Value	Unit
DC Input Voltage Pin 1, Pin 2	$V_{I1,2}$	20	V
Disable Input Voltage	V_{DIS}	20	V
Storage Temperature	T_{stg}	-65 to +150	°C
Junction Temperature	T_J	0 to +150	°C

INTEGRAL

THERMAL DATA

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

TYPICAL APPLICATION



ELECTRICAL CHARACTERISTICS

(V_{I1} = 7V, V_{I2} = 10V, T_J = +25 °C, unless otherwise specified)

Parameter	Symbol	Min	Max	Unit
Output Voltage I_{O1} = 10 mA	V_{O1}	5	5.2	V
Output Voltage I_{O2} = 10 mA	V_{O2}	7.84	8.16	V
Output Voltage 7 V < V_{I1} < 14 V 5 mA < $I_{O1,2}$ < 750 mA	V_{O1}	4.9	5.3	V
Output Voltage 10 V < V_{I2} < 14 V 5 mA < $I_{O1,2}$ < 750 mA	V_{O2}	7.7	8.3	V
Dropout Voltage $I_{O1,2}$ = 750 mA $I_{O1,2}$ = 1 A	$V_{IO1,2}$	 - -	 1.4 2	 V V
Line Regulation $I_{O1,2}$ = 200 mA 7 V < V_{I1} < 14 V 10 V < V_{I2} < 14 V	 ΔU_{O1LI} ΔU_{O2LI}	 - -	 50 80	 mV mV
Load Regulation 5 mA < I_{O1} < 0.6 A 5 mA < I_{O2} < 0.6 A	 ΔU_{O1LO} ΔU_{O2LO}	 - -	 100 160	 mV mV
Quiescent Current I_{O1}= 10 mA Output 2 Disabled	I_Q	-	2.0	mA
Short Circuit Output Current V_{I1} = 7 V, V_{I2} = 10 V $V_{I1,2}$ = 16V	 $I_{O1,2SC}$ $I_{O1,2SC}$	 - -	 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 0V < V_{DIS} < 7V	I_{DIS}	-100	2	µA