

AN8066SP

Low Drop-out Voltage Regulator

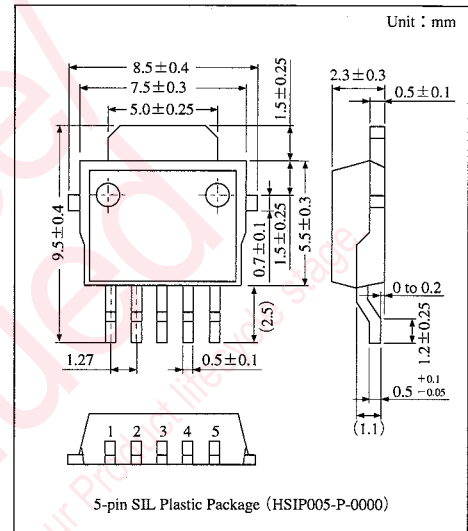
Overview

The AN8066SP is a voltage regulator IC with strobe pin capable or switching the output ON/OFF.

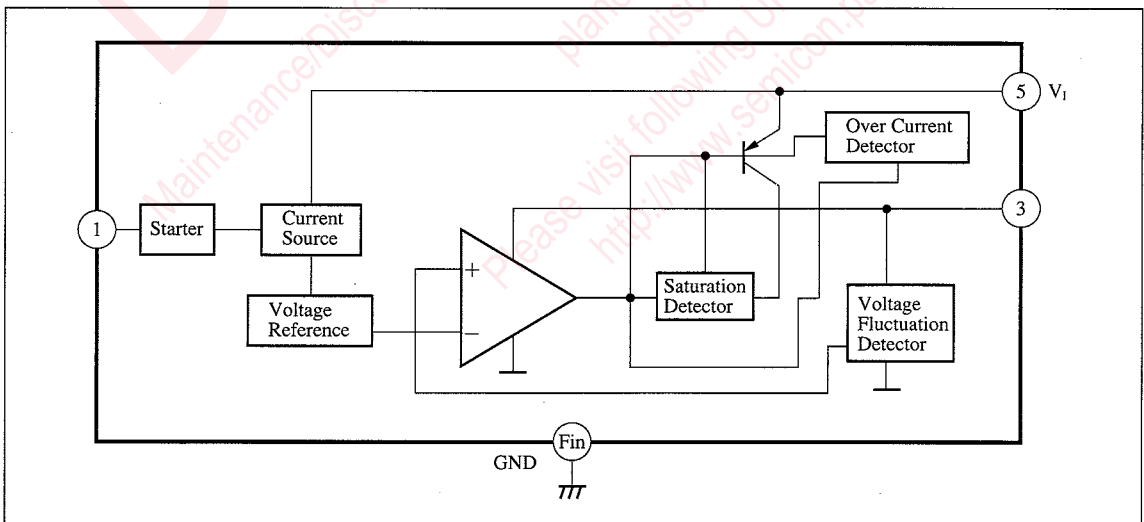
Its rated load current is 150 mA and output voltage is 6V fixed.

Features

- 150 mA rated load current and 6V fixed output voltage
- Capable of turning off the output by setting the strobe pin to the "L" level
- Minimum input/output voltage difference : typ. 0.25V
- Built-in over-current protective circuit
- Surface-mount type 5-pin SIL plastic package



Block Diagram



Voltage
Regu-
lators

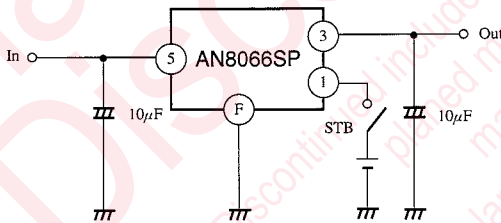
■ Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Supply voltage	V _I	14.4	V
Power dissipation	P _D	500	mW
Operating ambient temperature	T _{opr}	-20 to +75	°C
Storage temperature	T _{stg}	-55 to +125	°C

■ Electrical Characteristics (Ta=25°C)

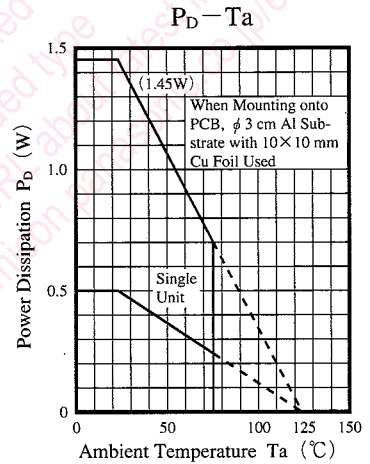
Parameter	Symbol	Condition	min	typ	max	Unit
Output voltage	V _O	V _I =13V, I _O =150mA	5.76	6	6.24	V
Output voltage range	V _I	V _I =7 to 14.4V, I _O =0 to 150mA	5.64	6	6.36	V
Bias current at no load	I _{bias}	V _I =13V, I _O =0mA	—	2.9	4	mA
Load regulation	REG _L	V _I =13V, I _O =0 to 150mA	—	—	100	mV
Line regulation	REG _{IN}	V _I =7 to 14V, I _O =150mA	—	—	100	mV
Minimum input/output voltage difference	V _{DIF(min.)}	V _I =5.5V, I _O =150mA	—	—	0.6	V
Rush current	I _{rush}	V _I =5.5V, I _O =0mA	—	2.5	—	mA
Output short-circuit current	I _{O(short)}	V _I =13V	350	—	550	mA
Load bias current fluctuation	ΔI _{biasl}	V _I =13V, I _O =0 to 150mA	—	—	10	mA
Off-state bias current	I _{OFF}	V _I =13V, V _S =0V	—	—	2	μA
Strobe pin input current	I _S	V _I =13V, V _S =2.5V	—	—	200	μA
Strobe pin threshold voltage	V _{S(TH)}	V _I =13V	0.8	2	2.4	V
Ripple rejection ratio	RR	V _I =11 to 14V, I _O =150mA, f=120Hz	—	55	—	dB

■ Application Circuit



- When using at a low temperature, it is recommended to use capacitors with a low internal impedance (for example, tantalum capacitors) for output capacitors.

■ Characteristics Curve



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