

Overview

This IC is a negative output 200mA LDO with fast turn-on by bipolar process.

The target applications are a negative power supply for highly sensitive CMOS image sensor by low noise design. And The IC has the line-up of output voltage -5.0V to -1.1V (0.1V steps) by the specifications of image sensor.

The package can be selected from SOT-25/SSON-6A for low cost or small space of PCB.

Application

- Photographing / Imaging device
- Power supply for high-sensitivity image sensor
- Power supply for negative voltage circuit

Features

Negative output with fast turn-on

Main specifications

Output current [mA]	200
Absolute maximum rating [V]	-12.0
Recommended operating voltage Min. [V]	-10.00
Recommended operating voltage	

MM1998

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Operating voltage		
Max.	[V]	-2.0
Output voltage		
Min.	[V]	-5.00
Output voltage		
Max.	[V]	-1.10
Output voltage accuracy		
[%]		±1.0
No-Load Input Current		
[μA]		160.0
Dropout Voltage		
[V]		0.50
PSRR		
[dB]		70
Output capacitor		
[μF]		1.00
Circuit structure		1ch LDO
Operating ambient temperature		
Min.	[deg.C]	-40
Operating ambient temperature		
Max.	[deg.C]	85
OFF input current		
Typ.	[μA]	4.00
Output noise voltage		
Typ.	[μVRMS]	20
Protection function		OCP, TSD, UVLO
Additional function		ON/OFF control (positive voltage control), Auto discharge, Fast turn-on, Noise reduction capacitor

Package[SOT-25A](#)[SSON-6A](#)

Case Studies

No amplifier or software design required. Development of an LDO for automobiles with open load/short circuit detection function. [Power Supply IC]