

LDO ICs

Micro-Power consumption 30V, 400mA, Low Low-Dropout Voltage Linear Regulator

**AS9134**

● General Description

The AS9134 is a CMOS low dropout, low noise, low power consumption, low quiescent current positive linear regulator with wide input voltage range. The AS9134 can deliver a guaranteed 400mA load current with a low dropout voltage. Quiescent current of only 2.0uA makes these devices ideal for powering the battery-powered, always-on systems that require very little idle-state power dissipation to a longer service life. There is an option of shutdown function by selecting the parts with the EN pin and pulling it low. The off state of AS9134 that consumes less than 0.1uA during shutdown mode.

The device is suitable for portable application such as cellular handsets or PDA. The AS9134 is designed and optimized to work with low cost ceramic capacitors 1.0uF, which consumes less than 0.1uA during shutdown mode. Besides, its current limit protection and on-chip thermal shutdown function provide protection against any combination of over-load or ambient temperature which could cause junction temperature exceeding maximum rating. The AS9134 includes a reference bypass pin in order to reduce output noise and a logic control shut-down input.

The space-saving tiny SOT23-3L, SOT23-5L, SOT89-3L and TO-252 packages are attractive for hand-held applications. The device is specified over an ambient temperature range of -40°C to 125°C.

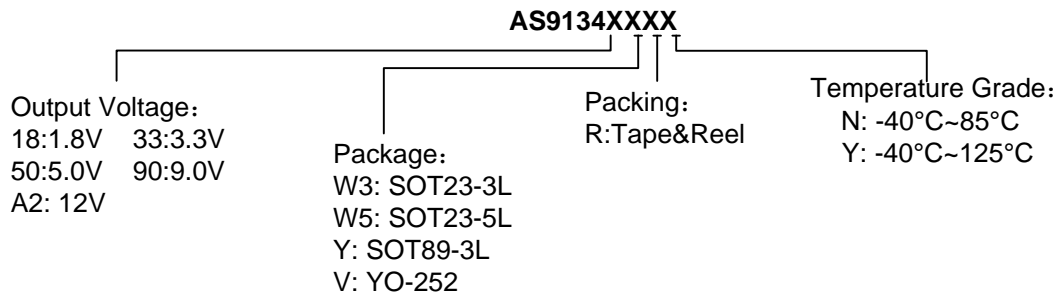
● Features

- Output Current Up to 400mA
- Wide Voltage V_{IN} Range: 2.0V to 30V
- Very Low Quiescent Current at 2.0uA
- Low Dropout voltage of 150mV at 100mA/ $V_{IN}=5V$
- Output Voltage Accuracy at $\pm 2.0\%$
- Support Fixed Output Voltage: 1.8V, 3.3V, 5V, 9V, 12V.
- PSRR 70dB at 100Hz
- Needs Only 1.0uF Capacitor for Stability
- Current Limit Protection
- Without EMI and Switch Noise
- Stable with Ceramic Capacitor or Tantalum Capacitor
- RoHS and Green Compliant
- SOT23-3L, SOT89-3L, TO-252 and SOT23-5L Packages
- -40°C to +125 °C Temperature Range

● Applications

- Portable, Battery Powered Equipment
- Low Power Microcontrollers
- Laptop, Palmtops & PDAs
- Audio/Video Equipment
- Car Navigation Systems
- Industrial Control
- Weighting Scales
- Meters/Home Automation

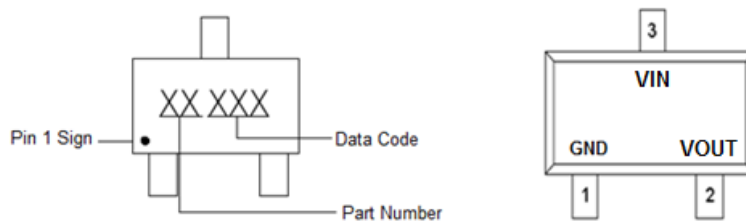
● Ordering Information



Part Number	Driver Capability	Package Type	Package Qty	Temperature	Eco Plan
AS9134-XXYRN	400mA	SOT89-3L	13-in reel 3000pcs/reel	-40~85°C	RoHS
AS9134-XXW3RN	400mA	SOT23-3L	7-in reel 3000pcs/reel	-40~85°C	RoHS
AS9134-XXW5RN	400mA	SOT23-5L	7-in reel 3000pcs/reel	-40~85°C	RoHS
AS9134-XXYRY	400mA	SOT89-3L	13-in reel 3000pcs/reel	-40~125°C	RoHS
AS9134-XXW5RY	400mA	SOT23-5L	7-in reel 3000pcs/reel	-40~125°C	RoHS
AS9134-XXVRY	400mA	TO-252	13-in reel 2500pcs/reel	-40~125°C	RoHS

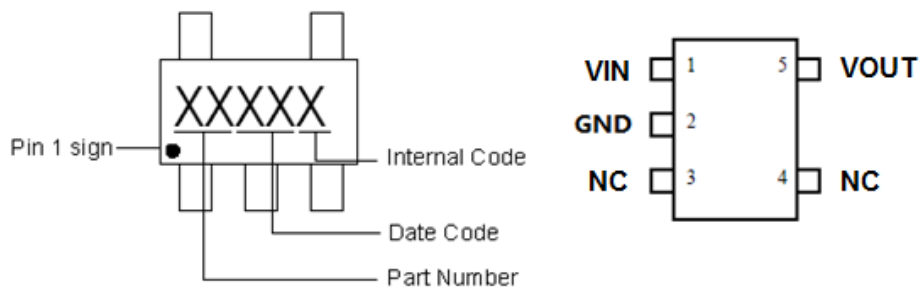
● Marking Information & Pin Assignment

SOT23-3L:



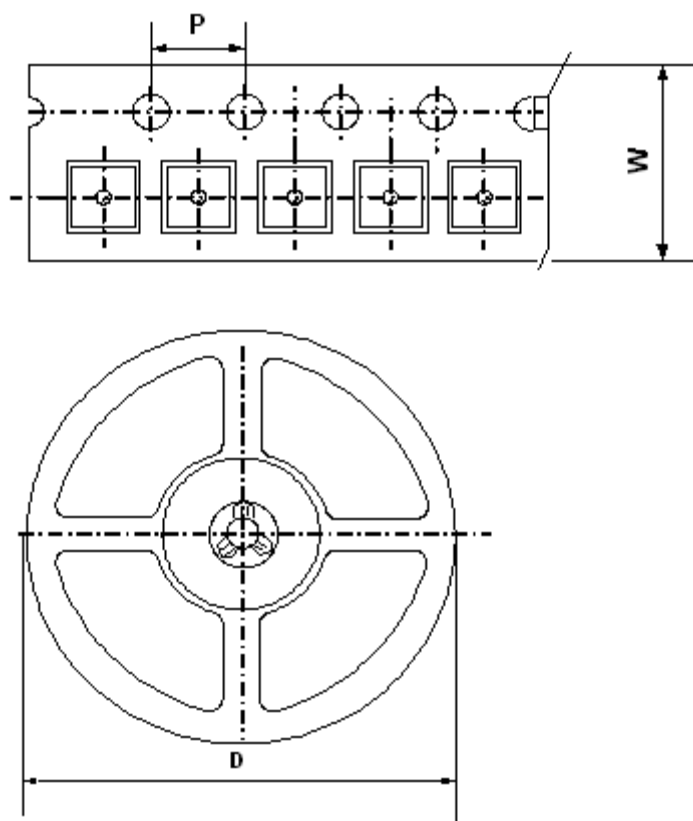
Pin Name	Pin No.	I/O	Pin Function
	SOT23-3L		
VOUT	2	O	Output Pin
GND	1	P	Ground
VIN	3	P	Input Power Supply

SOT23-5L:



Pin Name	Pin No.	I/O	Pin Function
	SOT23-5L		
VIN	1	P	Input Power Supply
GND	2	P	Ground
NC	3	-	Not Connected.
NC	4	-	Not Connected.
VOUT	5	O	Output Pin

■ Packing Information



Package Type	Carrier Width(W)	Pitch(P)	Reel Size(D)	Packing Minimum
SOT23-3L	8.0±0.1 mm	4.0±0.1 mm	180±1 mm	3000pcs
SOT23-5L	8.0±0.1 mm	4.0±0.1 mm	180±1 mm	3000pcs
SOT89-3L	12.0±0.1 mm	4.0±0.1 mm	330±1 mm	3000pcs
TO-252L	12.0±0.1 mm	4.0±0.1 mm	330±1 mm	2500pcs

Note: Carrier Tape Dimension, Reel Size and Packing Minimum