

R1131N Series

Low Voltage 300mA LDO

The R1131N Series are CMOS-based LDO regulators featuring 300mA output. The input voltage (VIN) is as low as Min. 1.4V and the output voltage can be set from 0.8V. The CE pin can switch the regulator into standby mode. Ceramic capacitors can be used. (Vouт ≥ 1.0V)

FEATURES

- Supply Current (Iss) ····Typ. 80μA (V_{IN}=SET Vour+1.0V, Vour<1.8V)
 • Output Voltage Accuracy ·······± 2%
 - Typ. 60μA (Same as above, Vouτ ≥ 1.8V)
- Standby Current (Istandby) ······Typ. 0.1μA (Same as above, in standby)
- Dropout Voltage (VDIF) · · · · · Typ. 0.23V (IOUT=300mA, VOUT=2.8V)
- Ripple Rejection (RR).....Typ. 65dB (f=1kHz)
- Input Voltage Range (V_{IN})··············· 1.4V to 6.0V
- Output Voltage Range (Vouт)······· 0.8V to 3.3V (internally fixed)
- Temp. coeff. of Output Voltage ······Typ. ± 100ppm/°C
- Line RegulationTyp. 0.01%/V
- Fold-back Protection Circuit Current limit Typ. 50mA
- Auto-Discharge function ······ D Version
- Package ------SOT-23-5
- Ceramic capacitors can be used. ···1μF or more (Vouт ≥ 1.0V)

BLOCK DIAGRAMS

R1131Nxx1A (CE pin "L" active)

(CE pin "H" active)

R1131Nxx1B

(With Auto-Discharge function) GND

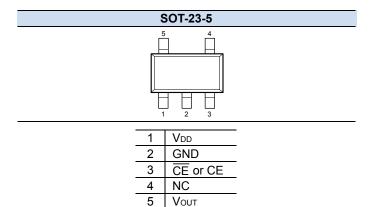
R1131Nxx1D

SELECTION GUIDES

| Halogen Free | Package | Q'ty per Reel | Part No. |
|--------------|----------|---------------|------------------|
| H/F | SOT-23-5 | 3,000 pcs | R1131Nxx1*-TR-FE |

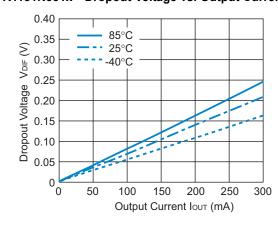
- xx : Specify the output voltage within the range of 0.8V (08) to 3.3V (33) in 0.1V steps.
- : Select the polarity of the CE pin from (A) "L" active, (B) "H" active or (D) "H" active with auto-discharge function.

PACKAGES (Top View)



TYPICAL CHARACTERISTIC

R1131N331x Dropout Voltage vs. Output Current



APPLICATIONS

- Power source for hand-held communication equipment, cameras, and VCRs
 Power source for battery-powered equipment
- Power source for home appliances

No FK-116-120403 CMOS LDO Regulator



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RICOH COMPANY, LTD. Electronic Devices Company



■Ricoh presented with the Japan Management Quality Award for 1999.

Ricoh continually strives to promote customer satisfaction, and shares the achievements of its management quality improvement program with people and society.

■Ricoh awarded ISO 14001 certification.

The Ricoh Group was awarded ISO 14001 certification, which is an international standard for environmental management systems, at both its domestic and overseas production facilities. Our current aim is to obtain ISO 14001 certification for all of our pusiness offices.

http://www.ricoh.com/LSI/

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Ricoh completed the organization of the Lead-free production for all of our products.

After Apr. 1, 2006, we will ship out the lead free products only. Thus, all products that will be shipped from now on comply with RoHS Directive.