

R1111N/R1121N Series

150mA 8V Input LDO

The R1111N/R1121N Series are CMOS-based LDO regulators featuring 150mA output. (Under $1.5V \le VOUT \le 1.7V$ conditions, 100mA) R1111N/R1121N has a high maximum input voltage rating of 8V, which makes the product ideally suitable for use in power source for various equipment, including hand-held communication equipment. The polarity of the CE pin can be selected. Two different pin layout as R1111N and R1121N are available.

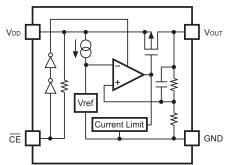
FEATURES

- Supply Current (Iss) -------Typ. 35μA (VIN=SET VOUT+1.0V)
- Standby Current (I_{standby})Typ. 0.1μA (Same as above, in standby)
- Dropout Voltage (VDIF)Typ. 0.2V (IOUT=100mA, VOUT=2.8V)
- Ripple Rejection (RR).....Typ. 70dB (f=1kHz)
- Input Voltage Range (V_{IN})------2.0V to 8.0V
- Output Voltage Range (Vout) 1.5V to 5.0V (internally fixed)
- Output Voltage Accuracy -----± 2%
- Temp. coeff. of Output VoltageTyp. ± 100ppm/°C
- Line Regulation-----Typ. 0.05%/V
- Fold-back Protection Circuit------Current limit Typ. 50mA
- Package----SOT-23-5
- Replaceable with LP2980, LP2985. (R1111N)
- Replaceable with TK111, TK112, or TK113. (R1121N)

BLOCK DIAGRAMS

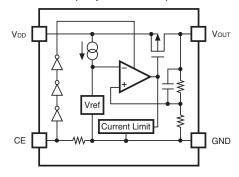
R1111Nxx1A R1121Nxx1A

(CE pin "L" active)



R1111Nxx1B R1121Nxx1B

(CE pin "H" active)

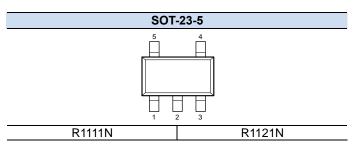


SELECTION GUIDE

| Halogen Free | Package | Q'ty per Reel | Part No. |
|--------------|----------|---------------|------------------|
| H/F | SOT-23-5 | 3,000 pcs | R1111Nxx1*-TR-FE |
| | | | R1121Nxx1*-TR-FE |

- xx : Specify the output voltage within the range of 1.5V (15) to 5.0V (50) in 0.1V steps.
 - *: Select the polarity of the CE pin from (A) "L" active or (B) "H" active.

PACKAGE (Top View)

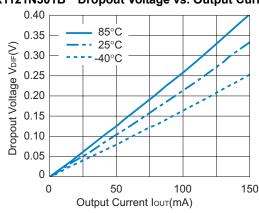


| 1 | V _{DD} |
|---|-----------------|
| 2 | GND |
| 3 | CE or CE |
| 4 | NC |
| 5 | Vouт |

| 1 | Vouт |
|---|-----------------|
| 2 | GND |
| 3 | V _{DD} |
| 4 | CE or CE |
| 5 | NC |

TYPICAL CHARACTERISTIC

R1111N301B R1121N301B Dropout Voltage vs. Output Current



APPLICATIONS

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

Power source for battery-powered equipment

No.EK-057-101001 CMOS LDO Regulator



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■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 business offices.

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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.