

# R1112N/R1122N Series

## Low Noise 150mA LDO

The R1112N/R1122N Series are CMOS-based LDO regulators featuring 150mA output. High ripple rejection and excellent load transient response of the series make the product ideally suited for use in power source for hand-held communication equipment. The polarity of the CE pin can be selected. Two different pin layout as R1112N and R1122N are available. Ceramic capacitors can be used.

#### **FEATURES**

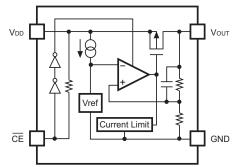
- Supply Current (Iss) ......Typ. 100μA (VIN=SET VOUT+1V)
- Standby Current (I<sub>standby</sub>) ......Typ. 0.1μA (Same as above, in standby)
- Dropout Voltage (VDIF) ......Typ. 0.19V (IOUT=100mA, VOUT=2.8V)
- Ripple Rejection (RR).....Typ. 80dB (f=1kHz)
- Input Voltage Range (V<sub>IN</sub>)------2.0V to 6.0V
- Output Voltage Range (Vo∪т)········· 1.5V to 5.0V (internally fixed)
- Output Voltage Accuracy -----± 2%

- Temp. coeff. of Output Voltage ·····Typ. ± 100ppm/°C
- Line Regulation-----Typ. 0.05%/V
- Fold-back Protection Circuit ...... Current limit Typ. 30mA
- Package ----- SOT-23-5
- Replaceable with LP2980 or LP2985. (R1112N)
- Replaceable with TK111, TK112 or TK113. (R1122N)
- Ceramic capacitors can be used. ...... 2.2μF or more

#### **BLOCK DIAGRAMS**

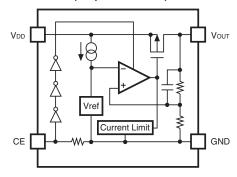
## R1112Nxx1A R1122Nxx1A

(  $\overline{\text{CE}}$  pin "L" active)



### R1112Nxx1B R1122Nxx1B

(CE pin "H" active)



#### **SELECTION GUIDE**

Package	<b>Quantity per Reel</b>	Part No.
SOT-23-5	3 000 pcs	R1112Nxx1*-TR-F
		R1122Nxx1*-TR-F

- xx : Specify the output voltage within the range 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)

## SOT-23-5

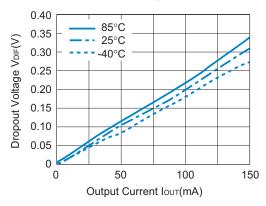


R1112N		R1122N				
	T				<del> </del>	
1	VDD			1	Vout	
2	GND			2	GND	
3	CE or CE		•	3	V <sub>DD</sub>	
4	NC			4	CE or CE	

NC

#### TYPICAL CHARACTERISTIC

#### R1112N301B R1122N301B 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-060-091101 CMOS LDO Regulator



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■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.