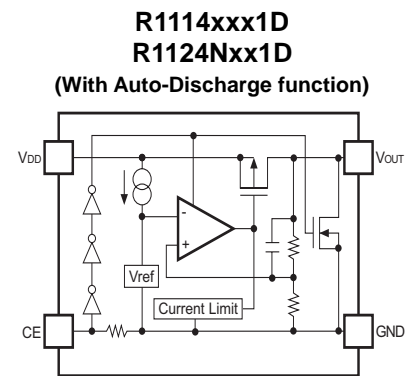
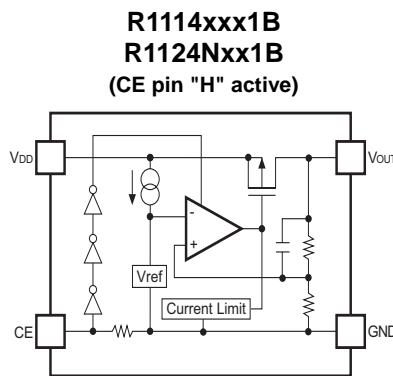
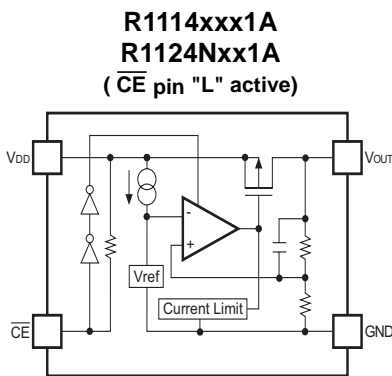


The R1114x/R1124N Series are CMOS-based LDO regulators featuring 150mA output. High ripple rejection and excellent load transient response of the series make the product ideally suited for use in power source for hand-held communication equipment. The polarity of the CE pin can be selected. The auto-discharge function is also available (see Selection Guide). Two different pin layout as R1114N and R1124N are available. Ceramic capacitors can be used.

FEATURES

- Supply Current (I_{SS}) Typ. 75 μ A ($V_{IN}=\text{SET } V_{OUT}+1\text{V}$)
- Standby Current ($I_{standby}$) Typ. 0.1 μ A (Same as above, in standby)
- Dropout Voltage (V_{DIF}) Typ. 0.22V ($I_{OUT}=150\text{mA}$, $V_{OUT}=2.8\text{V}$)
- Ripple Rejection (RR) Typ. 70dB ($f=1\text{kHz}$), Typ. 60dB ($f=10\text{kHz}$)
- Input Voltage Range (V_{IN}) 2.0V to 6.0V
- Output Voltage Range (V_{OUT}) 1.5V to 4.0V (internally fixed)
- Output Voltage Accuracy $\pm 2\%$
- Temp. coeff. of Output Voltage Typ. $\pm 100\text{ppm}/^\circ\text{C}$
- Line Regulation Typ. 0.02%/V
- Fold-back Protection Circuit Current limit Typ. 40mA
- Auto-Discharge function D Version
- Packages SON1612-6, SC-82AB, SOT-23-5 (R1124N is SOT-23-5 only)
- Ceramic capacitors can be used $C_{IN}=1\mu\text{F}$ or more
 $C_{OUT}=1\mu\text{F}$ or more ($1.5\text{V} \leq V_{OUT} < 2.5\text{V}$),
 $C_{OUT}=0.47\mu\text{F}$ or more ($V_{OUT} \geq 2.5\text{V}$)

BLOCK DIAGRAMS



SELECTION GUIDES

Package	Quantity per Reel	Part No.
SON1612-6	4,000 pcs	R1114Dxx1*-TR-F
SC-82AB	3,000 pcs	R1114Qxx1*-TR-F
SOT-23-5	3,000 pcs	R1114Nxx1*-TR-F
		R1124Nxx1*-TR-F

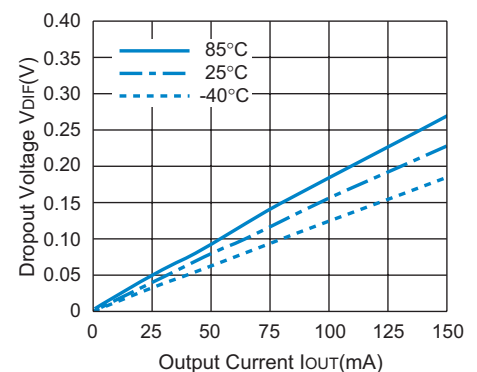
- xx : Specify the output voltage within the range 1.5V (15) to 4.0V (40) in 0.1V steps.
- * : Select the polarity of the CE pin from (A) "L" active, (B) "H" active or (D) "H" active with auto-discharge function.

PACKAGES (Top View)

SON1612-6		SC-82AB		SOT-23-5	
1	V_{DD}	1	$\overline{\text{CE}}$ or CE	1	V_{DD}
2	GND	2	GND	2	GND
3	V_{OUT}	3	V_{OUT}	3	$\overline{\text{CE}}$ or CE
4	NC	4	V_{DD}	4	NC
5	GND			5	V_{OUT}
6	$\overline{\text{CE}}$ or CE				NC

TYPICAL CHARACTERISTIC

**R1114x281x
R1124N281x** 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



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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.