

The R1114x 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). Ceramic capacitors can be used.

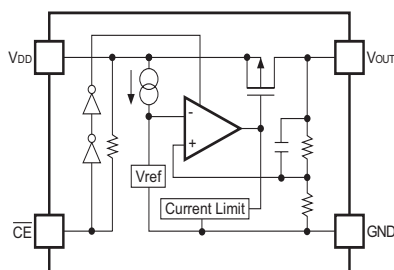
*) R1114N Series are suitable for automotive applications too. Please refer to our "Car Electronics Products Catalog" or contact us.

FEATURES

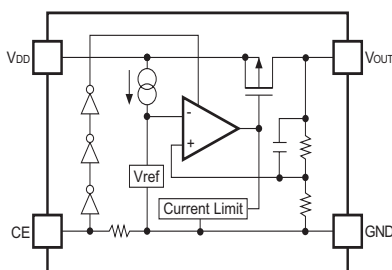
- Supply Current (I_{SS}) Typ. 75 μ A ($V_{IN}=V_{SET}+1.0V$)
- Standby Current ($I_{standby}$) Typ. 0.1 μ A (Same as above, In standby)
- Dropout Voltage (V_{DIF}) Typ. 0.22V ($I_{OUT}=150mA$, $V_{SET}=2.8V$)
- Ripple Rejection (RR) Typ. 70dB (f=1kHz), Typ. 60dB (f=10kHz)
- Input Voltage Range (V_{IN}) 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. $\pm 100ppm/^{\circ}C$
- 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
- Ceramic capacitors can be used $C_{IN}=1\mu F$ or more
 $C_{OUT}=1\mu F$ or more ($1.5V \leq V_{SET} < 2.5V$),
 $C_{OUT}=0.47\mu F$ or more ($V_{SET} \geq 2.5V$)

BLOCK DIAGRAMS

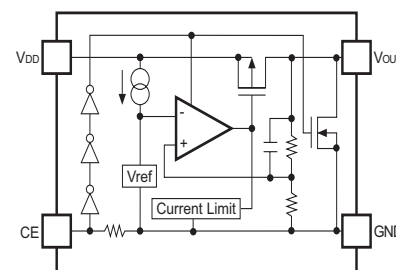
R1114xxx1A
(CE pin "L" active)



R1114xxx1B
(CE pin "H" active)



R1114xxx1D
(With Auto-discharge function)



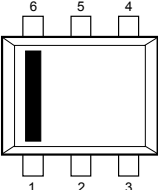
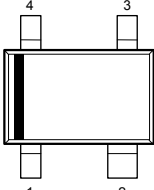
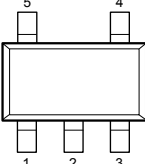
SELECTION GUIDES

Halogen Free	Package	Q'ty per Reel	Part No.
H/F	SON1612-6	4,000 pcs	R1114Dxx1*-TR-FE
H/F	SC-82AB	3,000 pcs	R1114Qxx1*-TR-FE
H/F	SOT-23-5	3,000 pcs	R1114Nxx1*-TR-FE

xx : Specify the output voltage within the range of 1.5V (15) to 4.0V (40) in 0.1V steps.

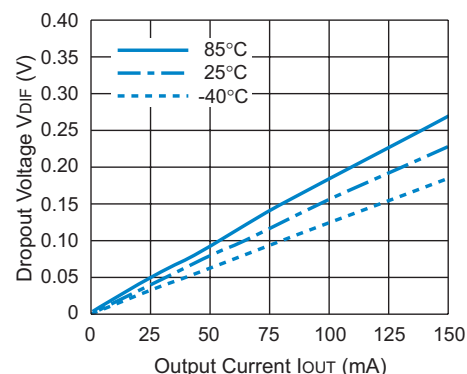
* : Select the polarity of the CE pin from (A) "L" active, (B) "H" active or (D) "H" active with auto-discharge function.

PACKAGES (Top View)

SON1612-6	SC-82AB	SOT-23-5																														
																																
<table><tr><td>1</td><td>V_{DD}</td></tr><tr><td>2</td><td>GND</td></tr><tr><td>3</td><td>V_{OUT}</td></tr><tr><td>4</td><td>NC</td></tr><tr><td>5</td><td>GND</td></tr><tr><td>6</td><td>$\overline{\text{CE}}$ or CE</td></tr></table>	1	V _{DD}	2	GND	3	V _{OUT}	4	NC	5	GND	6	$\overline{\text{CE}}$ or CE	<table><tr><td>1</td><td>$\overline{\text{CE}}$ or CE</td></tr><tr><td>2</td><td>GND</td></tr><tr><td>3</td><td>V_{OUT}</td></tr><tr><td>4</td><td>V_{DD}</td></tr></table>	1	$\overline{\text{CE}}$ or CE	2	GND	3	V _{OUT}	4	V _{DD}	<table><tr><td>1</td><td>V_{DD}</td></tr><tr><td>2</td><td>GND</td></tr><tr><td>3</td><td>$\overline{\text{CE}}$ or CE</td></tr><tr><td>4</td><td>NC</td></tr><tr><td>5</td><td>V_{OUT}</td></tr></table>	1	V _{DD}	2	GND	3	$\overline{\text{CE}}$ or CE	4	NC	5	V _{OUT}
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TYPICAL CHARACTERISTIC

R1114x281x 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
- Power source for automotive application



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For the conservation of the global environment, Ricoh is advancing the decrease of the negative environmental impact material.
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.
Basically after Apr. 1, 2012, we will ship out the Power Management ICs of the Halogen Free products only. (RicoH Halogen Free products are also Antimony Free.)

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