

R1114x Series

150mA LDO

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.

FEATURES

- Supply Current (Iss)------Typ. 75μA (V_{IN}=SET V_{OUT}+1.0V)
- Standby Current (I_{standby})··········· Typ. 0.1μA (Same as above, in standby)
- Dropout Voltage (VDIF) ······ Typ. 0.22V (IOUT=150mA, VOUT=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 (Vout) ········ 1.5V to 4.0V (internally fixed)
- Output Voltage Accuracy ± 2%
- Temp. coeff. of Output Voltage ······ Typ. ± 100ppm/°C

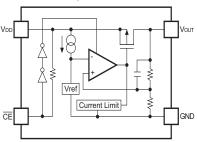
- Line Regulation ····· Typ. 0.02%/V
- Fold-back Protection Circuit Current limit Typ. 40mA
- Auto-Discharge function · · · · D Version
- Packages SON1612-6, SC-82AB,
 - SOT-23-5
- \bullet Ceramic capacitors can be used \cdots $C_{IN}\text{=}1\mu\text{F}$ or more

Cout=1 μ F or more (1.5V \leq Vout < 2.5V), Cout=0.47 μ F or more (Vout \geq 2.5V)

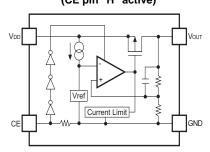
Cout=1µF or more (1.5V s

BLOCK DIAGRAMS

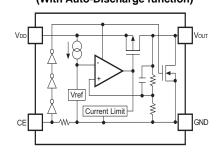
R1114xxx1A (CE pin "L" active)



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

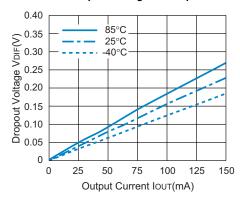
- xx : Specify the output voltage within the range of 1.5V (15) to 4.0V (40) in 0.1V steps
- ■: Select the polarity of the CE pin from (A) "L" active, (B) "H" active or (D) "H" active with auto-discharge function.

PACKAGES (Top View)

SON1612-6 SC-82AB SOT-23-5 2 CE or CE 1 Vdd 1 VDD 2 2 **GND** GND **GND** 3 3 **V**out **V**out CE or CE 4 NC V_{DD} 4 NC GND 5 Vout 6 CE or CE

TYPICAL CHARACTERISTIC

R1114x281x Dropout Voltage vs. Output Current



APPLICATIONS

- \bullet 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

No.EK-094-120326 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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