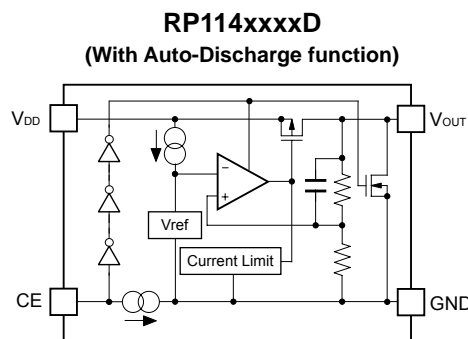
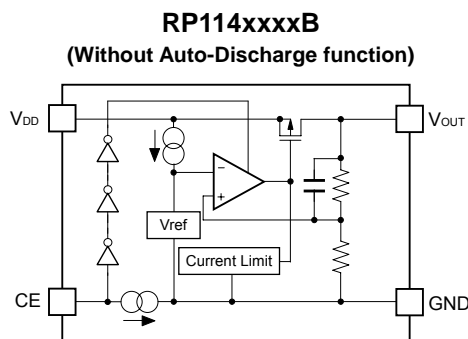


The RP114x Series are CMOS-based LDO regulators featuring 300mA output. RP114x features a supply current from 50μA, a minimum input voltage from 1.4V and the output voltage, which can be set from 0.8V to 3.6V (in 0.1V step). In addition to SOT-23-5 and SC-88A packages, a 1mm square DFN(PLP)1010-4 package is also available. Ceramic capacitors can be used.

FEATURES

- Supply Current (I_{SS}) Typ. 50μA ($V_{IN} = \text{SET } V_{OUT} + 1.0\text{V}$)
 - Standby Current ($I_{standby}$) Typ. 0.1μA (Same as above, CE="L")
 - Dropout Voltage (V_{DIF}) Typ. 0.25V ($I_{OUT} = 300\text{mA}$, $V_{OUT} = 2.8\text{V}$)
 - Ripple Rejection (RR) Typ. 70dB ($f = 1\text{kHz}$)
 - Input Voltage Range (V_{IN}) 1.4V to 5.25V
 - Output Voltage Range (V_{OUT}) 0.8V to 3.6V (internally fixed)
 - Output Voltage Accuracy $\pm 1\%$
 - Temp. coeff. of Output Voltage Typ. $\pm 80\text{ppm}/^\circ\text{C}$
 - Line Regulation Typ. 0.02%/V
 - Fold-back Protection Circuit Current limit Typ. 60mA
 - Auto-Discharge function D Version
 - Packages DFN(PLP)1010-4, SC-88A, SOT-23-5
 - Ceramic Capacitor can be used. 1μF or more
- (The above shows specification at $T_{opt} = 25^\circ\text{C}$. Design assurance value at $-40^\circ\text{C} \leq T_{opt} \leq 85^\circ\text{C}$ is also available. For details, please refer to the datasheet.)

BLOCK DIAGRAMS

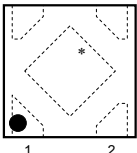
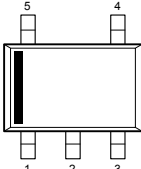
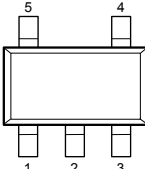


SELECTION GUIDES

Halogen Free	Package	Q'ty per Reel	Part No.
H/F	DFN(PLP)1010-4	10,000 pcs	RP114Kxx1*-TR
H/F	SC-88A	3,000 pcs	RP114Qxx2*-TR-FE
H/F	SOT-23-5	3,000 pcs	RP114Nxx1*-TR-FE

xx : Specify the output voltage within the range of 0.8V (08) to 3.6V (36) in 0.1V steps.
 * : Select from (B) without auto-discharge function or (D) with auto-discharge function.

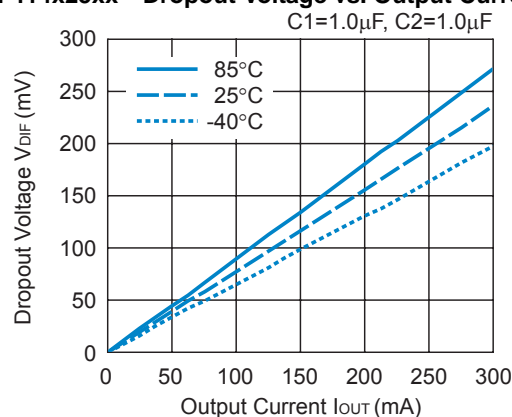
PACKAGES (Top View)

DFN(PLP)1010-4	SC-88A	SOT-23-5																												
																														
<table><tr><td>1</td><td>V_{OUT}</td></tr><tr><td>2</td><td>GND</td></tr><tr><td>3</td><td>CE</td></tr><tr><td>4</td><td>V_{DD}</td></tr></table>	1	V _{OUT}	2	GND	3	CE	4	V _{DD}	<table><tr><td>1</td><td>CE</td></tr><tr><td>2</td><td>NC</td></tr><tr><td>3</td><td>GND</td></tr><tr><td>4</td><td>V_{OUT}</td></tr><tr><td>5</td><td>V_{DD}</td></tr></table>	1	CE	2	NC	3	GND	4	V _{OUT}	5	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>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	CE	4	NC	5	V _{OUT}
1	V _{OUT}																													
2	GND																													
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4	NC																													
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*) The tab is substrate level (GND).

TYPICAL CHARACTERISTIC

RP114x25xx 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 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.