

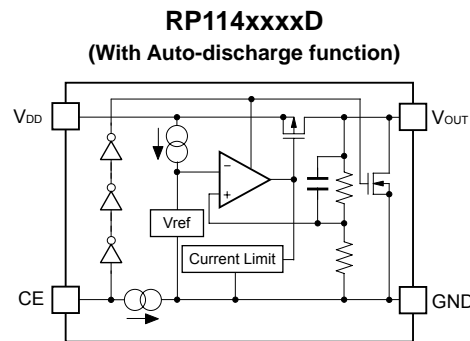
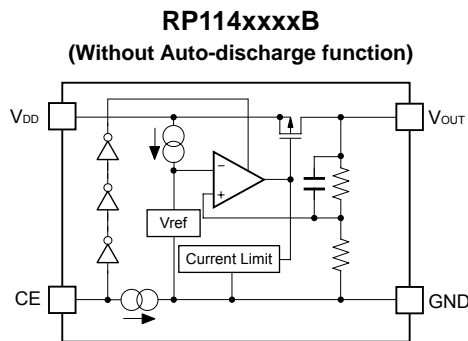
The RP114x Series are CMOS-based LDO regulators featuring 300mA output. RP114x features a supply current from 50 $\mu$ A, a minimum input voltage from 1.4V and the output voltage, which can be set from 0.8V to 3.6V (in 0.1V step). In addition to SOT-23-5 and SC-88A packages, a 1mm square DFN(PLP)1010-4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

### FEATURES

- Supply Current ( $I_{SS}$ ) ..... Typ. 50 $\mu$ A ( $V_{IN}=V_{SET}+1.0V$ )
- Standby Current ( $I_{standby}$ ) ..... Typ. 0.1 $\mu$ A (Same as above, CE="L")
- Dropout Voltage ( $V_{DIF}$ ) ..... Typ. 0.25V ( $I_{OUT}=300mA$ ,  $V_{SET}=2.8V$ )
- Ripple Rejection (RR) ..... Typ. 75dB ( $f=1kHz$ )
- Input Voltage Range ( $V_{IN}$ ) ..... 1.4V to 5.25V (Absolute maximum rating : 6.0V)
- Output Voltage Range ( $V_{OUT}$ ) ..... 0.8V to 3.6V (Internally fixed)
- Output Voltage Accuracy .....  $\pm 1\%$
- Temp. coeff. of Output Voltage ..... Typ.  $\pm 80ppm/^{\circ}C$
- 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. .... 1 $\mu$ F or more

(The above shows specification at  $T_{opt}=25^{\circ}C$ . Design assurance value at  $-40^{\circ}C \leq T_{opt} \leq 85^{\circ}C$  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.

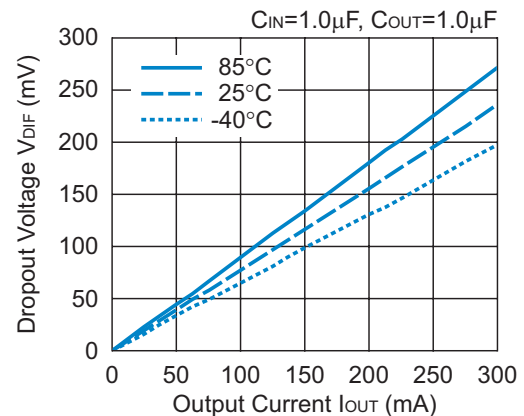
### PACKAGES (Top View)

DFN(PLP)1010-4		SC-88A		SOT-23-5	
1	$V_{OUT}$	1	CE	1	$V_{DD}$
2	GND	2	NC	2	GND
3	CE	3	GND	3	CE
4	$V_{DD}$	4	$V_{OUT}$	4	NC
		5	$V_{DD}$	5	$V_{OUT}$

\*) 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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#### Sales & Support Offices

##### **RICOH ELECTRONIC DEVICES CO., LTD.**

**Higashi-Shinagawa Office (International Sales)**  
3-32-3, Higashi-Shinagawa, Shinagawa-ku, Tokyo 140-8655, Japan  
Phone: +81-3-5479-2857 Fax: +81-3-5479-0502

##### **RICOH EUROPE (NETHERLANDS) B.V.**

**Semiconductor Support Centre**  
Prof. W.H. Keesomlaan 1, 1183 DJ Amstelveen, The Netherlands  
Phone: +31-20-5474-309

##### **RICOH ELECTRONIC DEVICES KOREA CO., LTD.**

3F, Haesung Bldg. 504, Teheran-ro, Gangnam-gu, Seoul, 135-725, Korea  
Phone: +82-2-2135-5700 Fax: +82-2-2051-5713

##### **RICOH ELECTRONIC DEVICES SHANGHAI CO., LTD.**

Room 403, No.2 Building, No.690 Bilbo Road, Pu Dong New District, Shanghai 201203,  
People's Republic of China  
Phone: +86-21-5027-3200 Fax: +86-21-5027-3299

##### **RICOH ELECTRONIC DEVICES CO., LTD.**

**Taipei office**  
Room 109, 10F-1, No.51, Hengyang Rd., Taipei City, Taiwan (R.O.C.)  
Phone: +886-2-2313-1621/1622 Fax: +886-2-2313-1623