

The RP154x Series are CMOS-based dual output LDO regulators featuring 300mA output. Various basic performances of the RP Series have been improved by adopting a new manufacturing process. RP154x features a supply current from 50μA per output, a minimum input voltage from 1.4V and the output voltage can be set from 0.8V to 3.6V (in 0.1V steps). RP154x is available in SOT-23-6 and DFN1216-8 packages. Due to the low minimum input voltage RP154L is able to extend battery life, additionally the LDO has less power dissipation by the low dropout voltage between input and output.

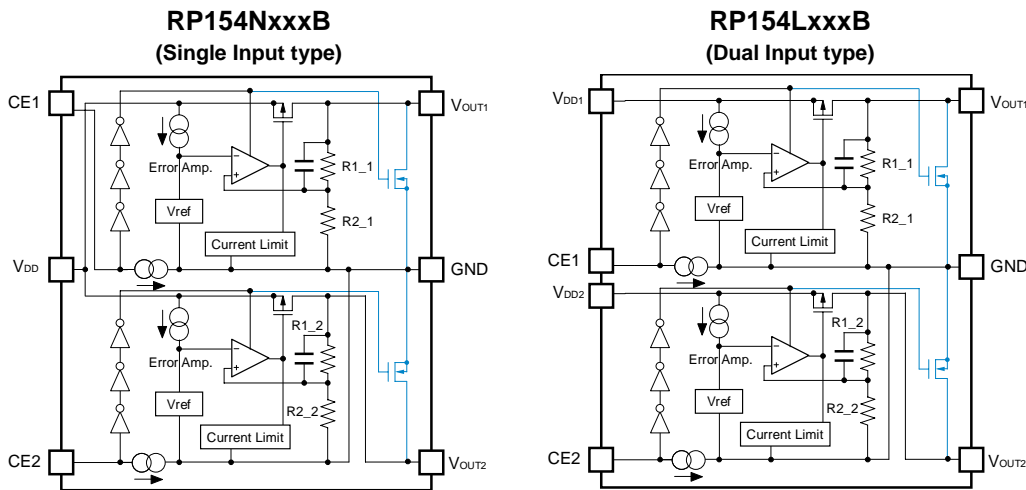
FEATURES

- Supply Current (I_{SS}) Typ. 50μA × 2 ($V_{IN}=\text{SET } V_{OUT}+1\text{V}$)
- Standby Current ($I_{standby}$) Typ. 0.1μA × 2 (Same as above, CE1/CE2="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 ± 1%
- Temp. coeff. of Output Voltage Typ. ± 80ppm/°C
- Line Regulation Typ. 0.02%/V
- Fold-back Protection Circuit Current limit Typ. 60mA
- Auto-Discharge function B Version
- Packages DFN1216-8, SOT-23-6
- Ceramic Capacitor can be used. 1μF or more

*) For information about combination of output voltage, visit our website to check.

(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



*) xxxA Version does not exist above blue line.

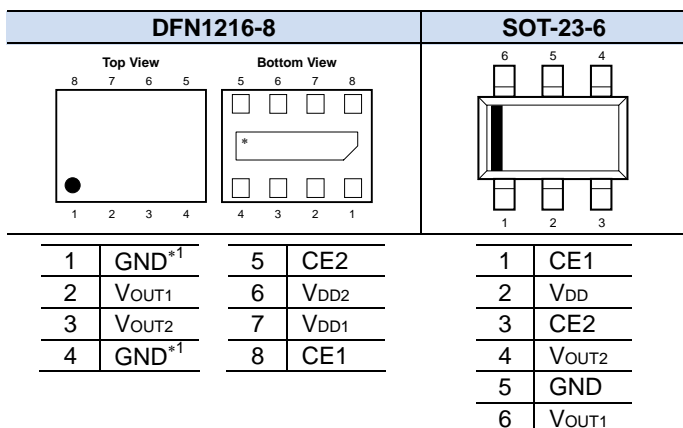
SELECTION GUIDES

Package	Quantity per Reel	Part No.
DFN1216-8	5,000 pcs	RP154Lxxx*-E2
SOT-23-6	3,000 pcs	RP154Nxxx*-TR-FE

xxx : Specify a combination of output voltage for each output using serial numbers.

* : Select from (A) without auto-discharge function or (B) with auto-discharge function.

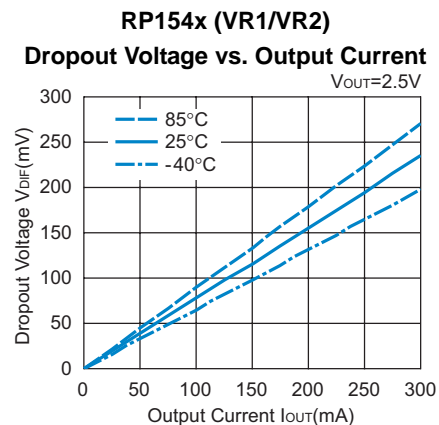
PACKAGES



*) The tab is substrate level (GND).

*1) The GND pin must be wired together when it is mounted on board.

TYPICAL CHARACTERISTIC



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 continually strives to promote customer satisfaction, and shares the achievements of its management quality improvement program with people and society.



■ Ricoh awarded ISO 14001 certification.
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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.