

Automatic Mode Shift Low Voltage Dual 150mA LDO

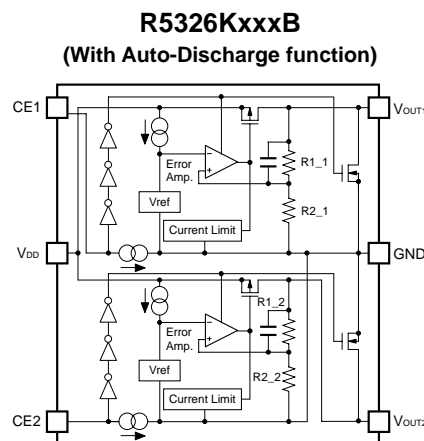
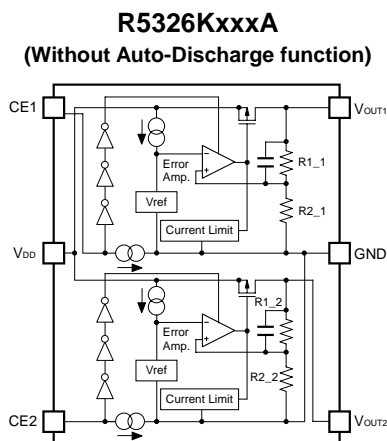
The R5326K Series are CMOS-based auto mode switching dual LDO regulators featuring 150mA output. In auto switching mode, the operation can switch automatically to a fast response mode or a low power mode of the ECO function according to output current. (Automatic switching to fast response mode under $I_{OUT} > 3\text{mA}$ conditions or to low power mode under $I_{OUT} > 0.6\text{mA}$ conditions.) In low power mode, supply current is as low as $5.5\mu\text{A}$. In fast response mode, ripple rejection is 70dB and noise is low. R5326K requires neither ECO pin for switching mode nor microcontroller pin. R5326K supports low voltage, featuring input voltage from 1.4V and output voltage from 0.8V. Standby mode and auto-discharge function are also available (see the Selection Guide). Ceramic capacitors can be used.

FEATURES

- Supply Current (I_{SS2}) Typ. $50\mu\text{A} \times 2$ (Fast mode, $V_{IN}=\text{SET } V_{OUT}+1.0\text{V}$)
- Supply Current (I_{SS1}) Typ. $5.5\mu\text{A} \times 2$ (Low power mode, same as above)
- Standby Current ($I_{standby}$) Typ. $0.1\mu\text{A} \times 2$ ($V_{IN}=6.0\text{V}$, $\text{CE1/CE2}=\text{"L"}$)
- Dropout Voltage (V_{DIF}) Typ. 0.19V ($I_{OUT}=150\text{mA}$, $V_{OUT}=2.8\text{V}$)
- Ripple Rejection (RR) Typ. 70dB ($f=1\text{kHz}$), Typ. 60dB ($f=10\text{kHz}$)
- Input Voltage Range (V_{IN}) 1.4V to 6.0V
- Output Voltage Range (V_{OUT}) 0.8V to 4.2V* (internally fixed)
- Output Voltage Accuracy $\pm 1\%$
- Temp. coeff. of Output Voltage Typ. $\pm 100\text{ppm}/^\circ\text{C}$
- Line Regulation Typ. 0.02%/V (Fast mode)
- Fold-back Protection Circuit Current limit Typ. 50mA
- Auto-Discharge function B Version
- Package DFN(PLP)1820-6
- Ceramic capacitors can be used. ... $1\mu\text{F}$ to $3.3\mu\text{F}$

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

BLOCK DIAGRAMS



SELECTION GUIDES

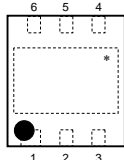
Halogen Free	Package	Q'ty per Reel	Part No.
H/F	DFN(PLP)1820-6	5,000 pcs	R5326Kxxx*-TR

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 (Top View)

DFN(PLP)1820-6



1	VOUT2
2	VDD
3	VOUT1
4	CE1
5	GND
6	CE2

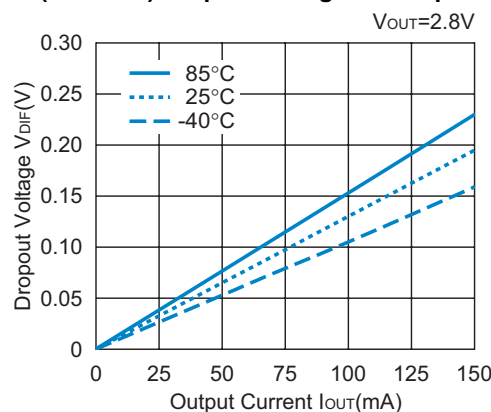
*) The tab is substrate level (GND).

APPLICATIONS

- Power source for hand-held communication equipment, cameras, and VCRs
- Power source for battery-powered equipment
- Power source for home appliances

TYPICAL CHARACTERISTIC

R5326K (VR1/VR2) Dropout Voltage vs. Output Current





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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.

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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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.