

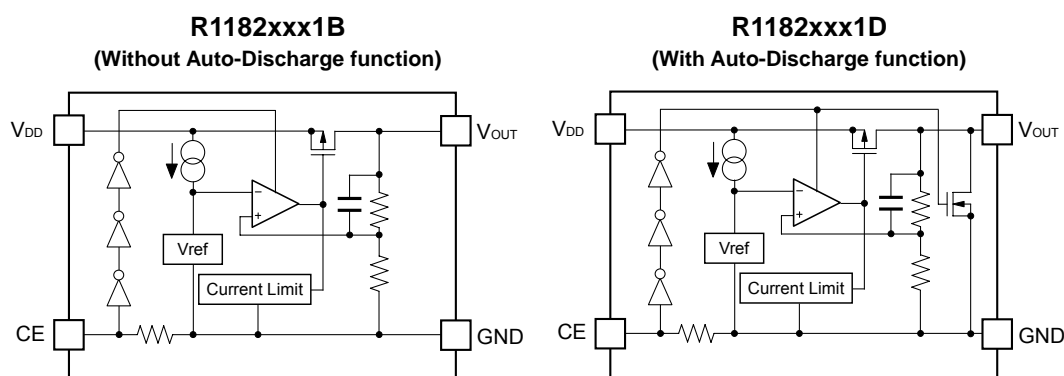
Seamless Low Supply Current 150mA LDO

The R1182x Series are CMOS-based seamless LDO regulators featuring 150mA output. Ricoh unique seamless technology smoothly changes transient response according to a output current without switching to a low power mode. Compared to the same seamless R1116x Series (10μA), R1182x features low supply current and low voltage. Additionally, the output voltage accuracy has improved to ±1%. Standby mode and auto-discharge function are also available (see Selection Guide). Ceramic capacitors can be used.

FEATURES

- Supply Current (I_{SS}) Typ. 3μA ($V_{IN}=SET$ $V_{OUT}+1.0V$)
- Standby Current ($I_{standby}$) Typ. 0.1μA (Same as above, $CE="L"$)
- Dropout Voltage (V_{DIF}) Typ. 0.23V ($I_{OUT}=150mA$, $V_{OUT}=2.8V$)
- Input Voltage Range (V_{IN}) 1.5V to 6.0V
- Output Voltage Range (V_{OUT}) 1.2V to 4.0V (internally fixed)
- Output Voltage Accuracy ± 1% ($V_{OUT} > 1.5V$),
± 15mV ($V_{OUT} \leq 1.5V$)
- Temp. coeff. of Output Voltage Typ. ± 100ppm/°C
- Line Regulation Typ. 0.1%/V
- Fold-back Protection Circuit Current limit Typ. 50mA
- Auto-Discharge function D Version
- Packages DFN(PLP)1616-6, SOT-23-5
- Ceramic capacitors can be used. 0.1μF or more

BLOCK DIAGRAMS



SELECTION GUIDES

Halogen Free	Package	Q'ty per Reel	Part No.
H/F	DFN(PLP)1616-6	5,000 pcs	R1182Kxx1*-TR
H/F	SOT-23-5	3,000 pcs	R1182Nxx1*-TR-FE

xx : Specify the output voltage within the range of 1.2V (12) to 4.0V (40) in 0.1V steps.
 * : Select from (B) without discharge function or (D) with auto-discharge function.

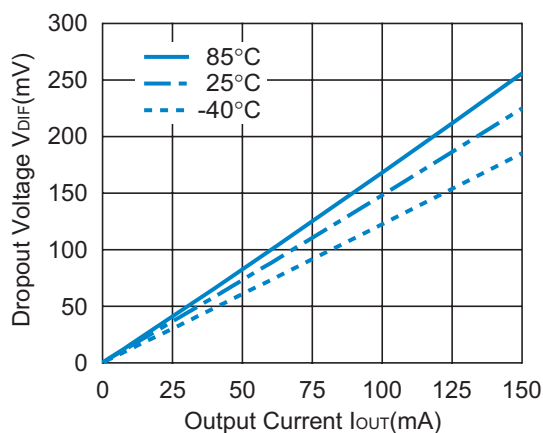
PACKAGES

DFN(PLP)1616-6		SOT-23-5	
Top View	Bottom View		
1	V_{DD}	1	GND
2	GND	2	V_{DD}
3	CE	3	V_{OUT}
4	NC	4	NC
5	NC	5	CE
6	V_{OUT}		

*) The tab is substrate level (GND).

TYPICAL CHARACTERISTIC

R1182x281x 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 presented with the Japan Management Quality Award for 1999.
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.

<http://www.ricoh.com/LSI/>

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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.