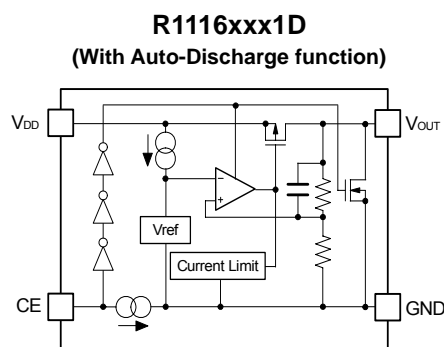
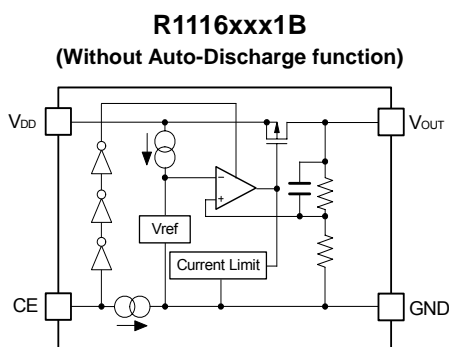


The R1116x Series are CMOS-based seamless LDO regulators featuring 150mA output. Ricoh unique seamless technology smoothly changes transient response according to the output current without switching to a low power mode. Thus, R1116x offers an ultra low supply current in the smaller output current range which is lower than the one of R1114x (Typ. 75μA). Additionally, this product can reach low supply current without changing mode only by using the ECO pin, which is required by R1162x Series (Typ. 5.5μA). The CE pin is capable of putting the product into standby mode. The version with an auto-discharge function is also available. The pin-out meets the standard requirements. Ceramic capacitors can be used.

FEATURES

- Supply Current (I_{SS}) Typ. 10μA ($V_{IN}=SET\ V_{OUT}+1.0V$)
- Standby Current ($I_{standby}$) Typ. 0.1μA (Same as above, CE="L")
- Dropout Voltage (V_{DIF}) Typ. 0.29V ($I_{OUT}=150mA, V_{OUT}=2.8V$)
- Ripple Rejection (RR) Typ. 70dB ($f=1kHz$), Typ. 53dB ($f=10kHz$)
- Input Voltage Range (V_{IN}) 1.8V to 6.0V
- Output Voltage Range (V_{OUT}) 1.5V to 4.0V (internally fixed)
- Output Voltage Accuracy $\pm 1.5\%$ ($1.5V \leq V_{OUT} \leq 3.4V$)
 $\pm 2.0\%$ ($3.4V < V_{OUT} \leq 4.0V$)
- Temp. coeff. of Output Voltage Typ. $\pm 100ppm/^{\circ}C$
- Line Regulation Typ. 0.02%/V
- Fold-back Protection Circuit Current limit Typ. 40mA
- Auto-Discharge function D Version
- Packages SON1612-6, SOT-23-5
- Ceramic capacitors can be used. ... 1μF or more

BLOCK DIAGRAMS



SELECTION GUIDES

Halogen Free	Package	Q'ty per Reel	Part No.
H/F	SON1612-6	4,000 pcs	R1116Dxx1*-TR-FE
H/F	SOT-23-5	3,000 pcs	R1116Nxx1*-TR-FE

xx : Specify the output voltage within the range of 1.5V (15) to 4.0V (40) in 0.1V steps.

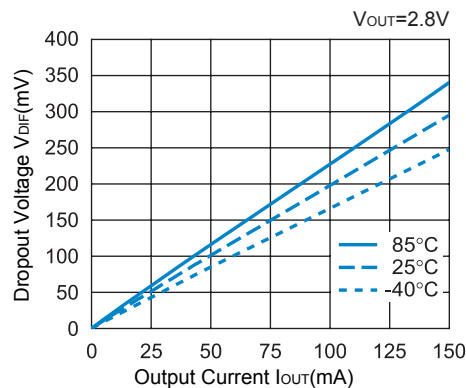
* : Select from (B) without auto-discharge function or (D) with auto-discharge function.

PACKAGES (Top View)

SON1612-6	SOT-23-5																						
<table border="1"> <tr><td>1</td><td>CE</td></tr> <tr><td>2</td><td>GND</td></tr> <tr><td>3</td><td>VDD</td></tr> <tr><td>4</td><td>VOUT</td></tr> <tr><td>5</td><td>GND</td></tr> <tr><td>6</td><td>NC</td></tr> </table>	1	CE	2	GND	3	VDD	4	VOUT	5	GND	6	NC	<table border="1"> <tr><td>1</td><td>VDD</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>VOUT</td></tr> </table>	1	VDD	2	GND	3	CE	4	NC	5	VOUT
1	CE																						
2	GND																						
3	VDD																						
4	VOUT																						
5	GND																						
6	NC																						
1	VDD																						
2	GND																						
3	CE																						
4	NC																						
5	VOUT																						

TYPICAL CHARACTERISTIC

R1116x281x 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 portable audio player
- Power source for home appliances



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■ Ricoh presented with the Japan Management Quality Award for 1999.
Ricoch 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.