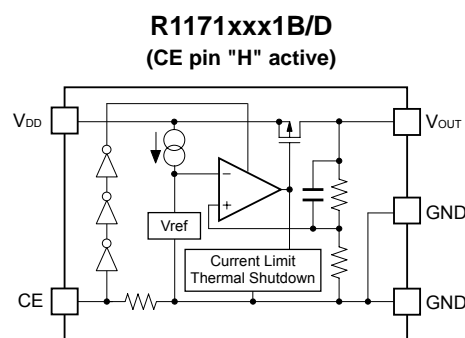
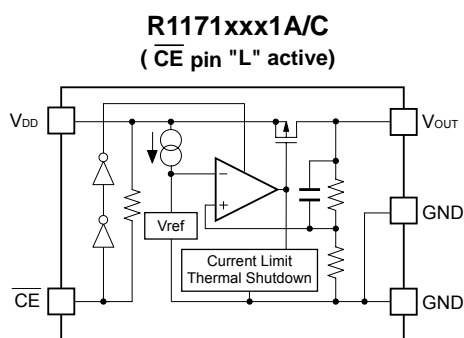


The R1171x Series are CMOS-based LDO regulators featuring 2A/1.5A output. The TO-252-5-P1 and the HSOP-6J that support high wattage can provide the output current up to 2A and 1.5A, respectively. The CMOS process provides both high output current and low supply current. The dropout voltage is significantly lower than bipolar regulators. The CE pin can switch the regulator into standby mode. In addition to a fold-back protection circuit built into conventional LDO regulators, R1171x has a thermal shutdown circuit. Ceramic capacitors can be used.

FEATURES

- Supply Current (I_{SS}) Typ. 130 μ A (V_{IN} =SET V_{OUT} +1.0V)
- Standby Current ($I_{standby}$) Typ. 0.1 μ A (Same as above, in standby)
- Output Current 2A (TO-252-5-P1), 1.5A (HSOP-6J)
- Dropout Voltage (V_{DIF}) Typ. 0.09V (I_{OUT} =300mA, V_{OUT} =2.8V)
- Ripple Rejection (RR) Typ. 50dB (f =1kHz)
- Input Voltage Range (V_{IN}) 2.1V to 6.0V
- Output Voltage Range (V_{OUT}) 1.5V to 5.0V (HSOP-6J, internally fixed)
1.8V to 5.0V (TO-252-5-P1, internally fixed)
- Output Voltage Accuracy $\pm 2\%$
- Temp. coeff. of Output Voltage Typ. ± 100 ppm/ $^{\circ}$ C
- Line Regulation Typ. 0.05%/V
- Fold-back Protection Circuit Current limit Typ. 200mA
- Thermal Shutdown Circuit Stops at 150 $^{\circ}$ C
- Packages HSOP-6J, TO-252-5-P1
- Ceramic capacitors can be used. $C_{IN}=C_{OUT}$ =10 μ F or more ($V_{OUT} < 1.8$ V)
 $C_{IN}=C_{OUT}$ =4.7 μ F or more ($V_{OUT} \geq 1.8$ V)

BLOCK DIAGRAMS



SELECTION GUIDES

Halogen Free	Package	Q'ty per Reel	Part No.
H/F	HSOP-6J	1,000 pcs	R1171Sxx1*-E2-FE
-	TO-252-5-P1	3,000 pcs	R1171Jyy1\$-T1-F

xx : Specify the output voltage within the range of 1.5V (15) to 5.0V (50) in 0.1V steps.

yy : Specify the output voltage within the range of 1.8V (18) to 5.0V (50) in 0.1V steps.

* : Select the polarity of the CE pin from (A) "L" active or (B) "H" active.

\$: Select the polarity of the CE pin from (C) "L" active or (D) "H" active.

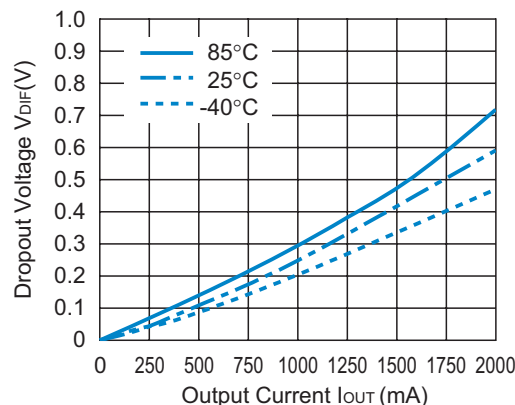
PACKAGES (Top View)

HSOP-6J	TO-252-5-P1																						
<table border="1"> <tr><td>1</td><td>V_{OUT}</td></tr> <tr><td>2</td><td>GND*</td></tr> <tr><td>3</td><td>\overline{CE} or CE</td></tr> <tr><td>4</td><td>NC</td></tr> <tr><td>5</td><td>GND*</td></tr> <tr><td>6</td><td>V_{DD}</td></tr> </table>	1	V_{OUT}	2	GND*	3	\overline{CE} or CE	4	NC	5	GND*	6	V_{DD}	<table border="1"> <tr><td>1</td><td>V_{OUT}</td></tr> <tr><td>2</td><td>\overline{CE} or CE</td></tr> <tr><td>3</td><td>GND*</td></tr> <tr><td>4</td><td>GND*</td></tr> <tr><td>5</td><td>V_{DD}</td></tr> </table>	1	V_{OUT}	2	\overline{CE} or CE	3	GND*	4	GND*	5	V_{DD}
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1	V_{OUT}																						
2	\overline{CE} or CE																						
3	GND*																						
4	GND*																						
5	V_{DD}																						

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

TYPICAL CHARACTERISTIC

R1171J301x Dropout Voltage vs. Output Current



APPLICATIONS

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



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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.