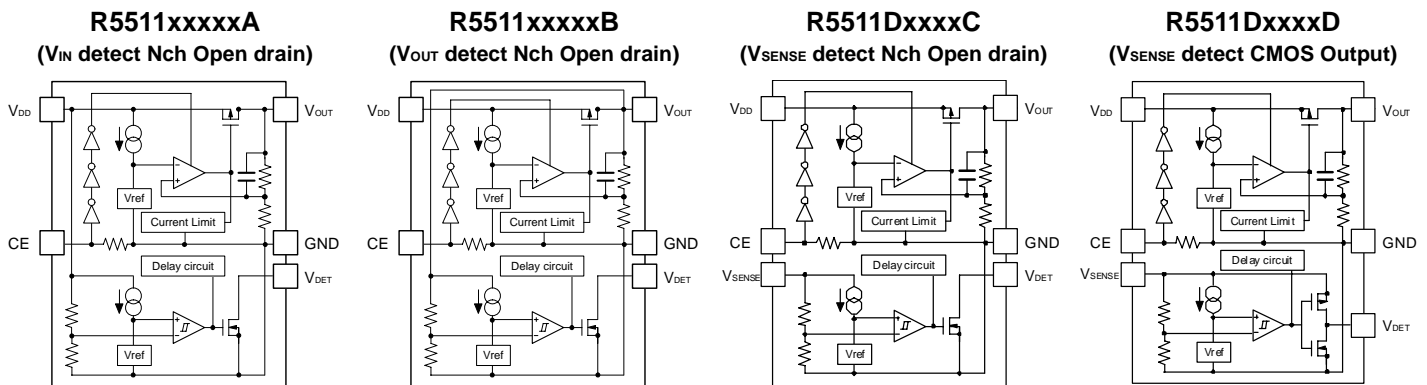


The R5511x Series are CMOS-based LDO regulators with voltage detector featuring 300mA output. The CE pin can switch the product into standby mode. Ceramic capacitors can be used. The voltage detector can select a target for detecting from V_{DD}, V_{OUT} or V_{SENSE} pins and outputs "L" when the voltage is detected and outputs "H" when it is released. Output delay time can be selected from four types: 1ms, 20ms, 60ms or 240ms.

FEATURES

- Supply Current (I_{SS1}) Typ. 50μA (V_{IN}=SET V_{OUT}+1V)
 - Standby Current (I_{standby}) Typ. 1.5μA (CE="L")
 - Dropout Voltage (V_{DIF}) Typ. 0.1V (I_{OUT}=100mA, V_{OUT}=2.8V)
 - Ripple Rejection (RR) Typ. 75dB (f=1kHz)
 - Input Voltage Range (V_{IN}) Max. 6.0V
 - Output Voltage Range (V_{OUT}) 1.2V to 4.0V (internally fixed)
 - Output Voltage Accuracy ± 1.5% (V_{OUT}≥2.0V)
 - Temp. coeff. of Output Voltage Typ. ± 100ppm/°C
 - Line Regulation Typ. 0.05%/V
 - Fold-back Protection Circuit Current limit Typ. 50mA
 - Detector Threshold Range (-V_{DET}) 1.2V to 5.0V (internally fixed)
 - Detector threshold Accuracy ± 1.5% (-V_{DET}≥2.0V)
 - Output Delay Time Can be selected from 1ms, 20ms, 60ms or 240ms.
 - Packages SON-6, SOT-23-5, SOT-89-5
 - Ceramic capacitors can be used. ...C_{IN}=C_{OUT}=1μF or more
- *) For information about combination of the output voltage and detector threshold and presence or absence of hysteresis, please check our website.

BLOCK DIAGRAMS



SELECTION GUIDES

Package	Quantity per Reel	Part No.
SON-6	3,000 pcs	R5511Dxxx\$*-TR-FE
SOT-23-5	3,000 pcs	R5511Nxxx\$#-TR-FE
SOT-89-5	1,000 pcs	R5511Hxxx\$#-T1-FE

xxx :Specify a combination of output voltage, detector threshold, and presence and absence of hysteresis using serial numbers.

- \$: Select the voltage detector output delay time from (A) 1ms, (B) 20ms, (C) 60ms or (D) 240ms.
- * : Select the detecting target and output type from (C) V_{SENSE} detect, Nch open drain output or (D) V_{SENSE} detect, CMOS output.
- # : Select the detecting target and output type from (A) V_{IN} detect, Nch open drain output or (B) V_{OUT} detect, Nch open drain output.

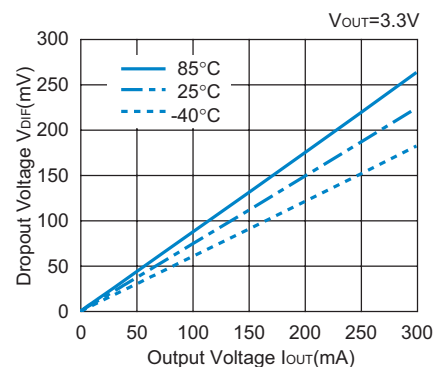
PACKAGES (Top View)

SON-6		SOT-23-5		SOT-89-5	
1	CE	1	CE	1	V _{DET}
2	GND	2	GND	2	GND
3	V _{OUT}	3	V _{DET}	3	CE
4	V _{DD}	4	V _{DD}	4	V _{OUT}
5	V _{SENSE}	5	V _{OUT}	5	V _{DD}
6	V _{DET}				

*) The tab suspension leads on back side are substrate level (GND).

TYPICAL CHARACTERISTIC

R5511x Dropout Voltage vs. Output Current



APPLICATIONS

- Power source for CD and DVD drives
- Power source for hand-held 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.