

0.6V detect VD with Delay Function and SENSE pin

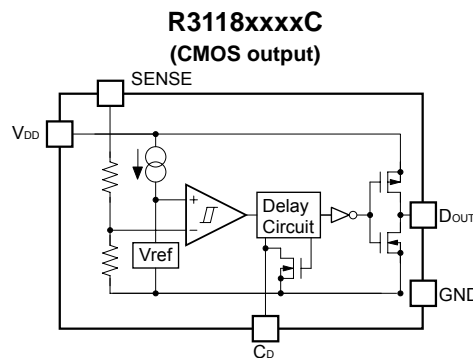
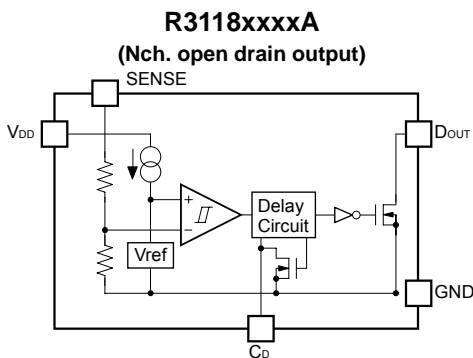
The R3118x Series are CMOS-based voltage detector ICs with the built-in output delay circuit. Since R3118x has a SENSE pin for monitoring voltage separately from the power pin, its reset signal does not become unstable under the condition that the power supply is sufficient to operate the IC, and the "L" can be maintained. The detector threshold can be specified from 0.6V. The delay time can be set with an external capacitor connected to C_D pin. In addition to SOT-23-5 and SC-88A packages, a 1.2mm square DFN(PLP)1212-6 package is also available.

FEATURES

- Supply Current (I_{SS}) Typ. 0.4μA (V_{SENSE}=6.0V, V_{DD}=6.0V)
- Operating Voltage Range (V_{DD}) 1.0V to 6.0V
- Detector Threshold Range (-V_{DET}) 0.6V to 5.0V (internally fixed)
- Output Delay Typ. 100ms delay set with a 0.022μF external capacitor
- Reset Signal "L"
- Detector Threshold Accuracy ± 1.5% (-V_{DET} ≥ 1.6V)
- Temp. coeff. of Detector Threshold Typ. ± 30ppm/°C
- Two Output Types Nch. Open Drain and CMOS
- Packages DFN(PLP)1212-6, SC-88A, SOT-23-5

(The above shows specification at T_{opt}=25°C. Design assurance value at -40°C ≤ T_{opt} ≤ 85°C is also available. For details, please refer to the datasheet.)

BLOCK DIAGRAMS

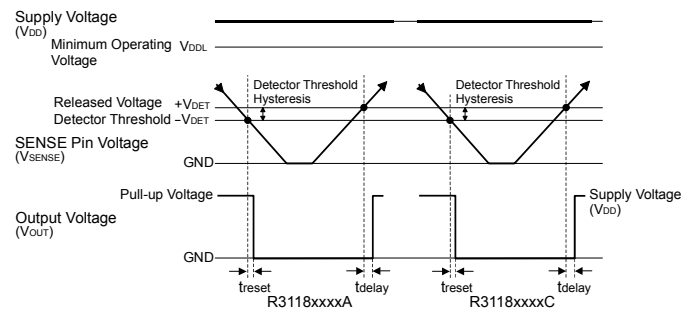


SELECTION GUIDES

Halogen Free	Package	Q'ty per Reel	Part No.
H/F	DFN(PLP)1212-6	5,000 pcs	R3118Kxx1*-TR
H/F	SC-88A	3,000 pcs	R3118Qxx2*-TR-FE
H/F	SOT-23-5	3,000 pcs	R3118Nxx1*-TR-FE

- xx : Specify the detector threshold within the range of 0.6 (06) to 5.0V (50) in 0.1V steps.
- * : Select the output type from (A) Nch. open drain or (C) CMOS.

TIMING CHART



PACKAGES (Top View)

DFN(PLP)1212-6	SC-88A	SOT-23-5																																
<table border="1"> <tr><td>1</td><td>SENSE</td></tr> <tr><td>2</td><td>GND</td></tr> <tr><td>3</td><td>C_D</td></tr> <tr><td>4</td><td>V_{DD}</td></tr> <tr><td>5</td><td>NC</td></tr> <tr><td>6</td><td>DOUT</td></tr> </table>	1	SENSE	2	GND	3	C _D	4	V _{DD}	5	NC	6	DOUT	<table border="1"> <tr><td>1</td><td>DOUT</td></tr> <tr><td>2</td><td>GND</td></tr> <tr><td>3</td><td>V_{DD}</td></tr> <tr><td>4</td><td>C_D</td></tr> <tr><td>5</td><td>SENSE</td></tr> </table>	1	DOUT	2	GND	3	V _{DD}	4	C _D	5	SENSE	<table border="1"> <tr><td>1</td><td>DOUT</td></tr> <tr><td>2</td><td>V_{DD}</td></tr> <tr><td>3</td><td>GND</td></tr> <tr><td>4</td><td>C_D</td></tr> <tr><td>5</td><td>SENSE</td></tr> </table>	1	DOUT	2	V _{DD}	3	GND	4	C _D	5	SENSE
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APPLICATIONS

- Microcontroller and logic circuit reset
- Battery checker
- Wave shaping circuit
- Battery back-up circuit
- Window comparator
- Power failure detector



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■ Ricoh awarded ISO 14001 certification.
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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.