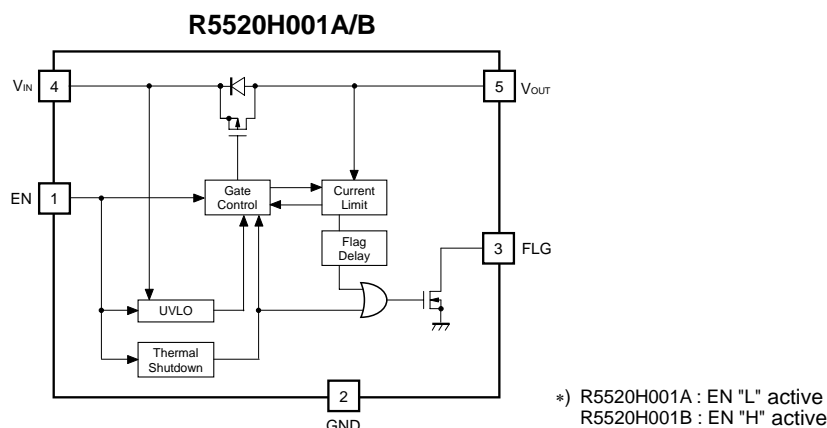


The R5520H Series are CMOS-based USB high side switch IC. R5520H is a protection IC used in power line of USB with built-in current limit circuit, thermal shutdown circuit, and under-voltage lockout circuit (UVLO). R5520H contains an internal delay circuit to prevent output of flag signal of false detection caused by inrush current.

## FEATURES

- Supply Current ( $I_{DD1}$ ) ..... Typ. 20 $\mu$ A (Enabled)
- Supply Current ( $I_{DD2}$ ) ..... Typ. 0.5 $\mu$ A (Disabled)
- Input Voltage Range ( $V_{IN}$ ) ..... 4.0V to 5.5V
- Switch ON Resistance ( $R_{ON}$ ) ..... Typ. 100m $\Omega$  ( $V_{IN}=5V$ ,  $I_{OUT}=500mA$ )
- UVLO Detect Voltage ( $V_{UVLO}$ ) ..... Typ. 2.2V
- Current Limit Threshold ..... Typ. 1.2A
- Short Current Limit ..... Typ. 750mA
- Over Current Flag Delay ..... Typ. 10ms
- Soft Start Function
- Thermal Shutdown Circuit ..... Stops at 135°C
- Package ..... SOT-89-5

## BLOCK DIAGRAM

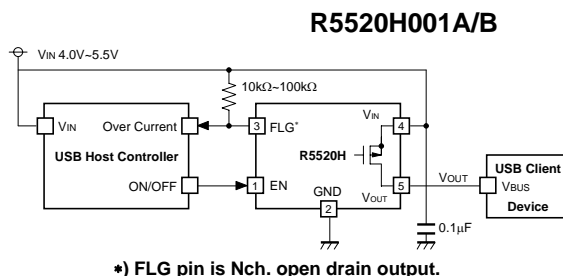


## SELECTION GUIDE

Halogen Free	Package	Q'ty per Reel	Part No.
H/F	SOT-89-5	1,000 pcs	R5520H001* -T1-FE

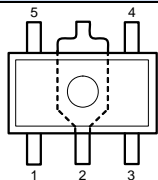
\* : Select the polarity of the EN from  
(A) "L" active or (B) "H" active.

## TYPICAL APPLICATION



## PACKAGE (Top View)

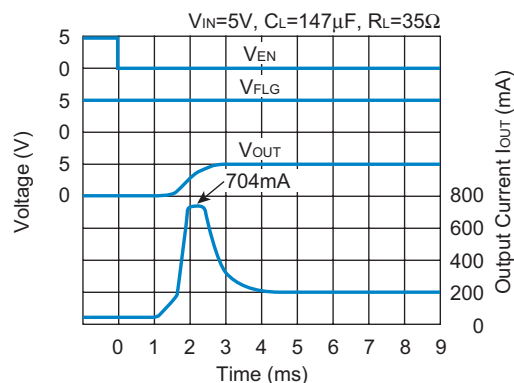
**SOT-89-5**



1	EN
2	GND
3	FLG
4	V <sub>IN</sub>
5	V <sub>OUT</sub>

## TYPICAL CHARACTERISTIC

**R5520H001A Turn-on response**



## APPLICATIONS

- USB peripherals
- Printers and office automation equipment
- TVs and audio equipment
- Personal computers
- Video cameras



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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.

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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.