



# Tiny switch Line UVLO

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# Line Under-voltage Sense

## ■ Multiply External resistor by 25 $\mu$ A UV Threshold

- ▶  $I_{D_{\text{cline}}} * (R_{D_{\text{cline}}}) = (I_{UV} - I_{R15}) * (R12+R13)$
- ▶  $(25-3.3)\mu\text{A} * (2\text{M} + 2\text{M}) = 87 \text{ V}_{DC}$

### Line Undervoltage Sense Circuit

The DC line voltage can be monitored by connecting an external resistor from the DC line to the ENABLE/ UNDERVOLTAGE pin. During power-up or when the switching of the power MOSFET is disabled in auto-restart, the current into the ENABLE/UNDERVOLTAGE pin must exceed 25  $\mu$ A to initiate switching of the power MOSFET.

## ■ >2 $\mu$ A Current flow in EN/UV to enable line UV by R15

The line undervoltage circuit also detects when there is no external resistor connected to the ENABLE/UNDERVOLTAGE pin (less than  $\sim 2 \mu\text{A}$  into the pin). In this case the line undervoltage function is disabled.

