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(54) **ELECTRONIC CIRCUITS AND SEMICONDUCTOR DEVICE HAVING THE SAME**

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(57) **ABSTRACT**

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The electronic circuits and semiconductor device having the same are provided. The electronic circuit includes: a first transistor including a first electrode coupled with an input voltage; a second transistor including a first electrode coupled with a second electrode of the first transistor; a first capacitor coupled between the first transistor and the second transistor; a first diode including a first terminal coupled with the first electrode of the first transistor; a second diode including a first terminal coupled with a second terminal of the first diode and a second terminal coupled with a second electrode of the second transistor; a second capacitor coupled between the first transistor and the first diode; and a third capacitor coupled between the first diode and the second transistor.

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