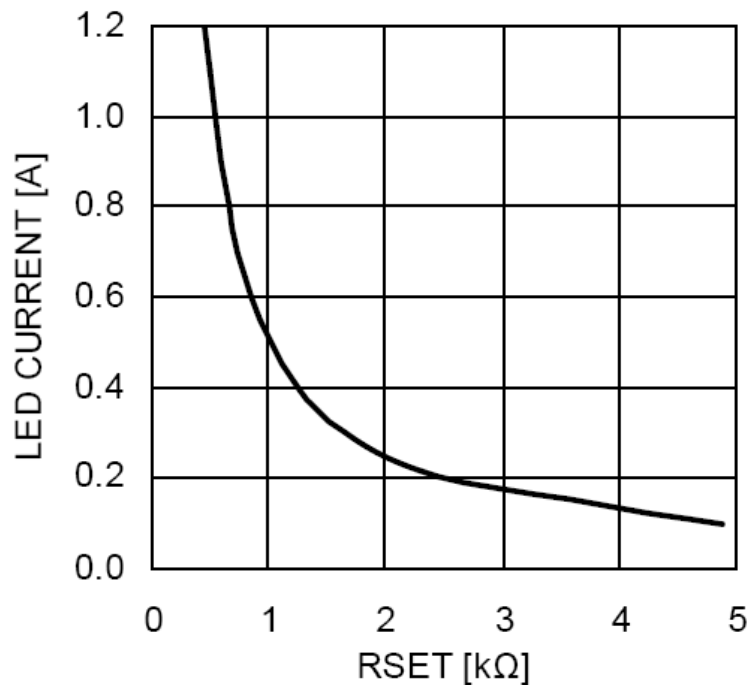


## LED Current vs. RSET Resistor



### BASIC OPERATION

The CAT4101 has one highly accurate LED current sink to regulate LED current in a string of LEDs. The LED current is mirrored from the current flowing from the RSET pin according to the following formula:

$$I_{LED} \cong 400 \times \frac{1.2 V}{R_{SET}}$$

The LED channel needs a minimum of 500 mV headroom to sink constant regulated current. If the input supply falls below 2 V, the under-voltage lockout circuit disables the LED channel.

For applications requiring current higher than 1 A, several CAT4101 devices can be connected in parallel.

The LED channel can withstand and operate at voltages up to 25 V. This makes the device ideal for driving long strings of high power LEDs from a high voltage source.

**Table 1. RSET Resistor Settings**

LED Current [mA]	RSET [Ω]
100	4870
350	1470
700	750
1000	549

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