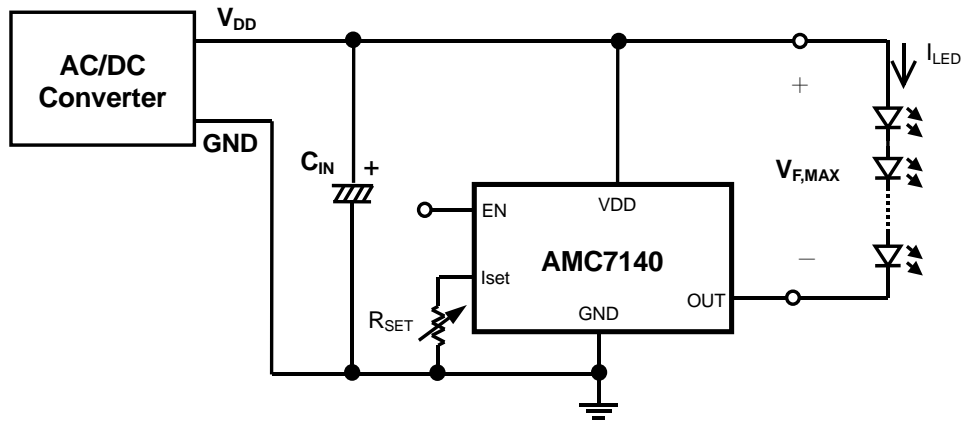# AMC7140 for LED Lighting

✓ **Typical Application Circuit:**

** Recommend：$V_{DD} = V_{F,MAX} + 0.5V$

** Tolerance：$V_{F.MAX} + 3V \geq V_{DD} \geq V_{F.MAX} + 0.35V$

(With appropriate heat-sink area for AMC7140)

✓ **BOM:**

C. R. No.	Q'TY	Description
IC	1	AMC7140DL
C_{IN}	1	E. C. Cap. 10uF/63V
R_{SET}	1	$R_{SET} = \dfrac{V_{SET}}{I_{SET}} = \dfrac{1.2V}{I_{SET}}$ ； $I_{SET} = \dfrac{I_{LED}}{500}$

◆ **Description**

【1】The recommended range for input voltage V_{DD} is: **$V_{F,MAX}+0.35V \leqq V_{DD} \leqq V_{F,MAX}+3V$**. Where, $V_{F,MAX}$ is the maximum total forward voltage drops of the LED string. Too large input voltage will result in too large voltage drop between OUT pin and GND pin. In such condition, additional heat sink is necessary and appropriate size of copper foil on EVM is required.

【2】The resistor R_{SET} is used to set the LED driving current. The minimum value of R_{SET} is 880Ω that is corresponding to the 700mA maximum output current.