

LED Series Resistor Calculation.

$$R = (V_s - V_f) / I_{\max}$$

Voltage Source, $V_s =$ 15 [V]

Forward LED voltage: $V_f =$ 2.0 [V]

Maximum LED current, $I_{\max} =$ 20 [mA]

Resistor = 650 [Ohm]

Resistor Power = 0.26 [W]

LED Power = 0.04 [W]