



now short  
the output

Now, all current will flow through  
the load, no voltage drop across  $R_2$

$$I = \frac{V_{IN}}{R_1} = \frac{V_{IN}}{3K3} = I_{oot} \text{ maximum}$$

$$Z_{oot} = \frac{V_{oot} \text{ no load}}{I_{oot} \text{ maximum}}$$

$$Z_{oot} = \frac{V_{IN}}{2} \div \frac{V_{IN}}{3K3} = \frac{V_{IN}}{2} \times \frac{3K3}{V_{IN}} = \frac{3K3}{2}$$