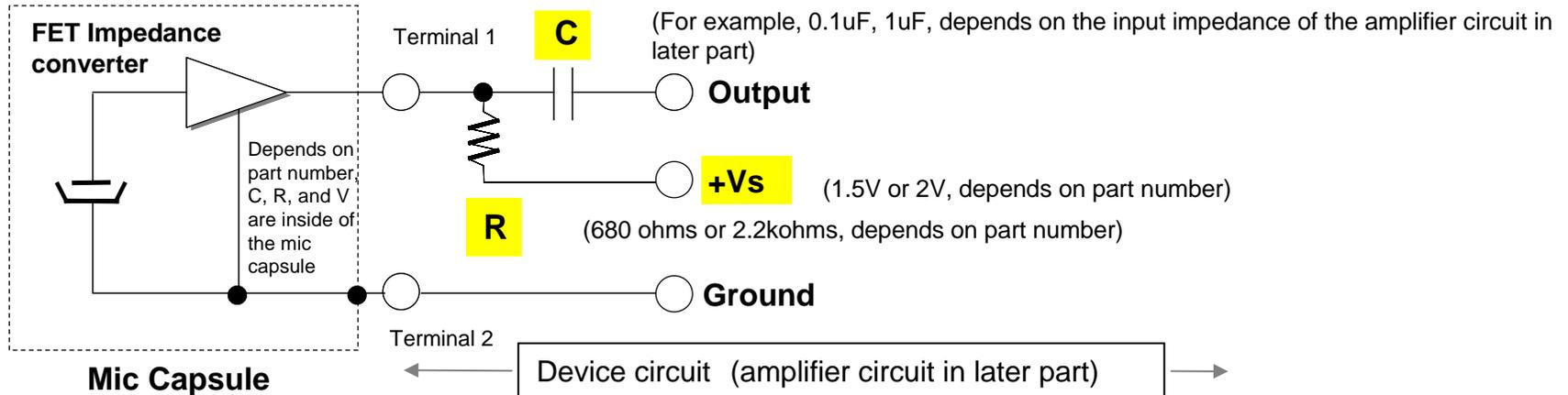


Electret Condenser Microphone (ECM) Schematic Diagram

The below is the standard schematic diagram for ECM.



About ECM's output impedance

- The output impedance of ECM is determined by R in the customers' device circuit.
- In above case, if there is R=2.2kohms in the device, 2.2kohms is the ECM's max output impedance.
- In general, please set the input impedance of the amplifier (Z_{in}) circuit minimum x10's times (i.e. 100kohms) compared to the ECM's output impedance in order to prevent any effect on the frequency response and the sensitivity of ECM.

About ECM's sensitivity

- ECM's sensitivity changes depends on the value of +Vs and R above. Please design +Vs and R as written in the specifications. If you use differently, please ask us about the effect.

About ECM's frequency response

- The output signal from Term.1 contains DC voltage. Please cut this DC with the coupling capacitor (C). The value of C is determined by the input impedance Z_{in} value of the amplifier circuit in later part. Depends on applications you need, please set the low cut-off frequency to eliminate non-need lower frequency.
- The low cut-off frequency (F_c) can be calculated by $F_c = 1/2 \pi C Z_{in}$.

* The information herein is for reference only. When designing, please check with your actual product.