

- Amplitude Distortion: The inability of an amplifier to reproduce an output that is a linear function of the input. i.e. clipping or crossover distortion
- Frequency Distortion: The inability of an amplifier to amplify all of the desired frequencies with the same gain.
- Phase Distortion: The inability of an amplifier to amplify all of the desired frequencies with the same time delay.
- Crossover Distortion: occurs in a Push-Pull, Class AB Amplifier when both transistors are off and the input signal voltage must exceed  $V_{BE}$  or  $V_B$  before a transistor conducts.
- Factors that affect Low Critical Frequency ( $f_{cl}$ ):
  - Coupling Capacitors & Bypass Capacitors
  - Decoupling Networks
  - Power Supply Filters
  - Resistance Values
- Factors that affect High Critical Frequency ( $f_{ch}$ ):
  - Device Capacitance
  - Stray Capacitance
  - Generator Capacitance
  - Gain
  - $f\tau$  & Slew Rate
  - Resistance Values
  - Probe Capacitance