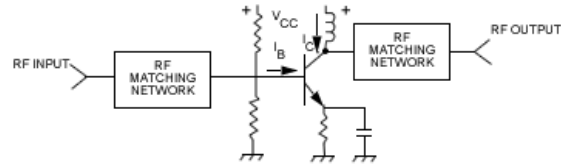
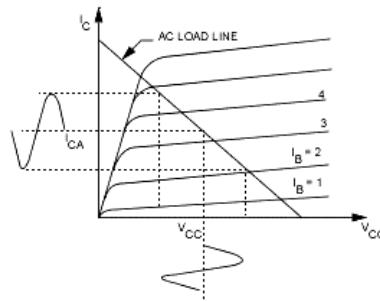


Class A Operation

Class A amplifiers have a fixed forward bias.



Base current, I_B , and collector current, I_C , flow over the full RF cycle. In addition, when operated below compression, the RF signal swing is uniformly above and below the quiescent DC bias set point and well within the linear region of the transistor.



Summary of Characteristics Class A

Class A Advantages:

- Excellent Linearity
- Low Distortion
- Faithful Pulse Response Below the 1 dB Compression Point
- Broad Bandwidth
- Good Noise Figure
- Low Bandpass Ripple at All Output Levels
- Medium Output Power Capability
- Phase & Gain Stable at All Output Levels

Class A Disadvantages:

- Poor Efficiency
- More Heat Dissipated
- Larger Size

Applications:

- TWT Replacements
- Sweeper/Synthesizer/Signal Generator Boosters
- TV Amplifiers
- Short Pulse Amplifiers
- Multicarrier Amplification
- Multicouplers
- Baseband Amplifiers
- IF and Low Noise Amplifiers
- Multi Decade Amplifiers
- AM Amplifiers
- Laboratory Drivers
- EW/ECM Jammers
- RFI Testing