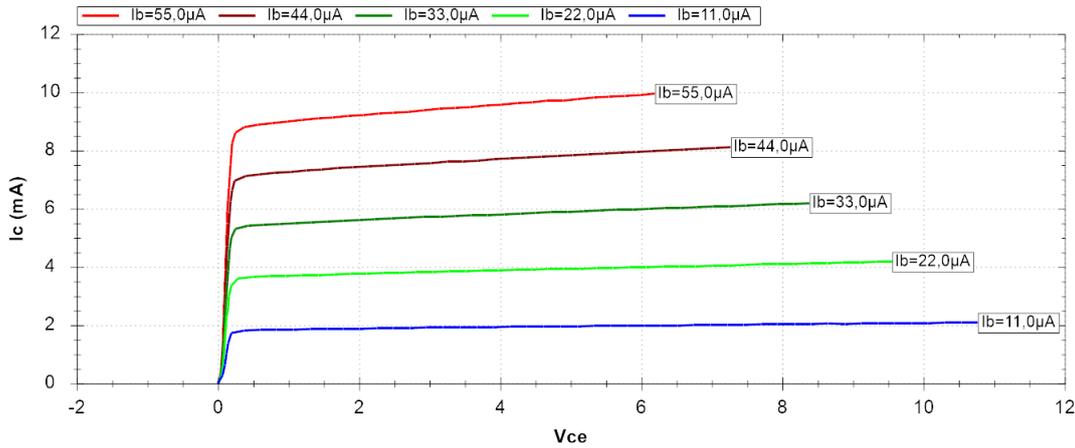
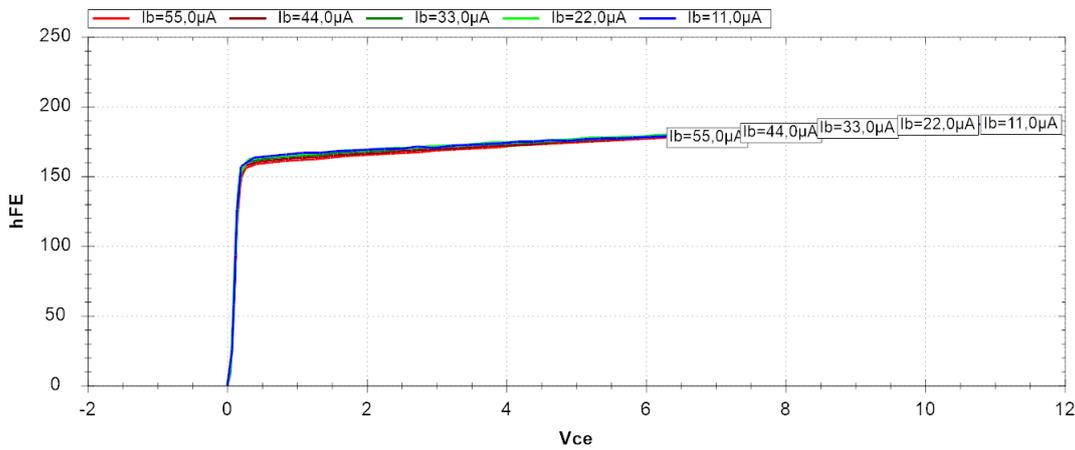


BC556A
 PNP Silicon BJT
 Red-E Green-B Blue-C
 $hFE=183$ at $I_c=5,00mA$
 $V_{be}=0,787V$ at $I_b=5,00mA$
 $V_{ceSat}=0,042V$ at $I_c=5,0mA$ and $I_b=1,00mA$
 $I_{cLeak}=0.000mA$

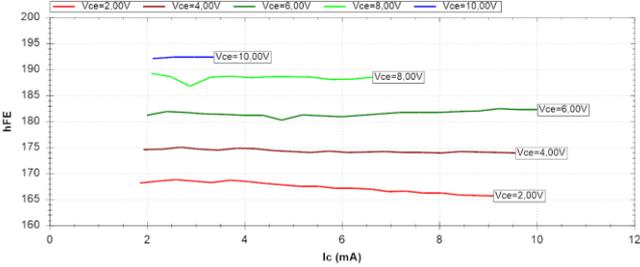
BJT I_c / V_{ce}



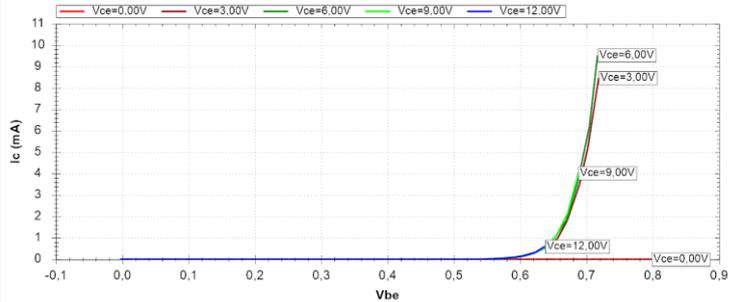
BJT hFE / V_{ce}



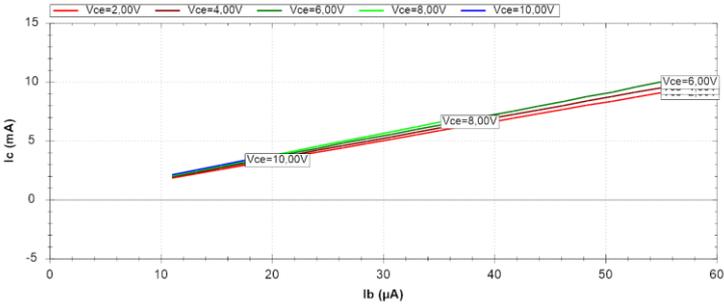
BJT hFE / I_c



BJT I_c / V_{be}



BJT I_c / I_b



- § Current gain (hFE) can be measured between 4 and 32000.
- § Gain accuracy for gain lower than 2000 is typically $\pm 3\% \pm 5hFE$.
- § Gain is determined by measuring the step change in base current required to obtain a step change of collector current of $5.0mA \pm 0.25mA$. This ensures that leakage current does not influence the gain figure.
- § Saturation Voltage V_{ceSat} is measured, with a collector current of 5mA and a base current of 1mA, if the hFE is greater than 10.
- § Base-emitter voltage drop is measured at a different base current to that used for the gain measurement.
- § Base-emitter voltage accuracy is typically $\pm 1\% \pm 0.006V$ at a current of typically $5.0mA \pm 1.0mA$.
- § If the base-emitter voltage is less than 0.55V, then it is likely that the transistor is a germanium type.
- § Leakage current of germanium types can vary hugely with small temperature variations. Even the cooling after handling (or the warming during handling) can influence the leakage current very significantly. That is normal.
- § Gain of silicon and germanium types is influenced by temperature, particularly for higher gain devices.
- § Gain will vary considerably over different collector currents.