

These electrons will, then be attracted towards the collector because of its high positive potential,???? – passing through the collector junction (fig.2).The emitter–base junction (the emitter junction) and the base–collector junction (the collector junction).Biasing a transistor Forward bias is applied on the emitter junction with a value that exceeds the knee voltage; many free electrons will enter the base, crossing the emitter junction.The variable parameters of this circuit are: I_B , I_C , V_{CE} , V_{BE} The instantaneous value of these variables are : i_{SS} , i_c , V_{CE} , V_{be} The independent variables of these are: i_{SS} , V_{CE} The dependent variables are: i_c , V_{BE} ISTICS The transistor is a semiconductor crystal with three doped regions (NPN transistor or PNP,fig. So $I_E = I_C + I_B$ with I_B being very small it can be said that $I_C = I_E$ Fig 2 is redrawn using the transistor symbol (this circuit is known as the common base; since the base is common between the two circuits.The emitter is heavily doped; its job is to emit, or inject, electrons into the base.The transistor (is, thus, composed of two pn–junctions.?????????????????: ? 1