EENG 385 - Electronic Devices and Circuits

Lab 5 - Calibrating the BJT Curve Tracer

Just Solutions

**Oscilloscope in X/Y Mode**

Table : The X,Y values of the curve in **Error! Reference source not found.**.

|  |  |  |
| --- | --- | --- |
| Time | Ch 1 (X) | Ch 2 (Y) |
| Blue | 2 | 0 |
| Purple | 1.4 | 1.4 |
| Orange | 0 | 2 |
| Pink | -2 | 0 |
| Brown | 0 | -2 |
| Red | 2 | 0 |

**Axis Scale for BJT Curve Tracer**

Table : The base current for each step of the staircase function created in Lab 3.

|  |  |  |
| --- | --- | --- |
| Trace | VSTAIR | ib (uA) |
| 9 | 8.03 | 15.6 |
| 8 | 7.84 | 15.2 |
| 7 | 6.95 | 13.3 |
| 6 | 6.06 | 11.4 |
| 5 | 5.07 | 9.3 |
| 4 | 4.18 | 7.4 |
| 3 | 3.29 | 5.5 |
| 2 | 2.39 | 3.6 |
| 1 | 1.41 | 1.5 |
| 0 | 0V | 0 |