附录2.4 EXCEL环境下基于仿真数据生成的稳压二极管的伏安特性曲线

附表2.3 基于仿真测量获取的稳压二极管伏安特性数据

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 采样点 | 电位器设定位置 | 输入电压Uin(V) | 二极管电压Ud（V) | 二极管电流Id/（mA） |
| 1 | 0.001 | 14.830 | 0.6537 | 14.1763 |
| 2 | 0.002 | 14.660 | 0.6531 | 14.0069 |
| 3 | 0.005 | 14.180 | 0.6516 | 13.5284 |
| 4 | 0.01 | 13.430 | 0.6491 | 12.7809 |
| 5 | 0.015 | 12.760 | 0.6467 | 12.1133 |
| 6 | 0.02 | 12.150 | 0.6444 | 11.5056 |
| 7 | 0.025 | 11.580 | 0.6421 | 10.9379 |
| 8 | 0.03 | 11.070 | 0.6400 | 10.43 |
| 9 | 0.035 | 10.590 | 0.6379 | 9.9521 |
| 10 | 0.04 | 10.150 | 0.6359 | 9.5141 |
| 11 | 0.045 | 9.738 | 0.6340 | 9.104 |
| 12 | 0.05 | 9.356 | 0.6321 | 8.7239 |
| 13 | 0.055 | 9.000 | 0.6302 | 8.3698 |
| 14 | 0.06 | 8.667 | 0.6285 | 8.0385 |
| 15 | 0.07 | 8.060 | 0.6250 | 7.435 |
| 16 | 0.08 | 7.522 | 0.6217 | 6.9003 |
| 17 | 0.09 | 7.040 | 0.6185 | 6.4215 |
| 18 | 0.1 | 6.607 | 0.6154 | 5.9916 |
| 19 | 0.11 | 6.215 | 0.6125 | 5.6025 |
| 20 | 0.15 | 4.952 | 0.6013 | 4.3507 |
| 21 | 0.2 | 3.823 | 0.5882 | 3.2348 |
| 22 | 0.25 | 2.984 | 0.5751 | 2.4089 |
| 23 | 0.3 | 2.316 | 0.5611 | 1.7549 |
| 24 | 0.35 | 1.752 | 0.5446 | 1.2074 |
| 25 | 0.4 | 1.251 | 0.5222 | 0.7288 |
| 26 | 0.45 | 0.775 | 0.4815 | 0.2931 |
| 27 | 0.47 | 0.575 | 0.4446 | 0.1305 |
| 28 | 0.49 | 0.278 | 0.2685 | 0.009 |
| 29 | 0.495 | 0.133 | 0.1261 | 0.0068 |
| 30 | 0.5 | -0.017 | -0.0237 | 0.00676 |
| 31 | 0.55 | -1.517 | -1.5230 | 0.006 |
| 32 | 0.6 | -3.016 | -3.0230 | 0.007 |
| 33 | 0.65 | -4.515 | -4.5220 | 0.007 |
| 34 | 0.67 | -5.115 | -5.1120 | -0.003 |
| 35 | 0.68 | -5.414 | -5.4210 | 0.007 |
| 36 | 0.683 | -5.504 | -5.5100 | 0.006 |
| 37 | 0.687 | -5.619 | -5.6230 | 0.004 |
| 38 | 0.7 | -5.870 | -5.8080 | -0.062 |
| 39 | 0.71 | -5.999 | -5.8530 | -0.146 |
| 40 | 0.73 | -6.236 | -5.9000 | -0.336 |
| 41 | 0.75 | -6.474 | -5.9270 | -0.547 |
| 42 | 0.8 | -7.135 | -5.9700 | -1.165 |
| 43 | 0.85 | -7.978 | -6.0010 | -1.977 |
| 44 | 0.9 | -9.171 | -6.0280 | -3.143 |
| 45 | 0.95 | -11.100 | -6.0560 | -5.044 |
| 46 | 0.99 | -13.920 | -6.0820 | -7.838 |

附图2.2 基于仿真数据生成的稳压二极管1N4735伏安特性曲线