**Appendix A**

TABLE Ⅰ

体效应管在0V-13V的I-U曲线原始数据.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **次数** | **电压** |  | **次数** | **电压** |  |
| 1 | 0.5 | 117 | 14 | 7 | 417 |
| 2 | 1 | 224 | 15 | 7.5 | 417 |
| 3 | 1.5 | 315 | 16 | 8 | 419 |
| 4 | 2 | 389 | 17 | 8.5 | 420 |
| 5 | 2.5 | 439 | 18 | 9 | 422 |
| 6 | 3 | 465 | 19 | 9.5 | 424 |
| 7 | 3.5 | 474 | 20 | 10 | 404 |
| 8 | 4 | 442 | 21 | 10.5 | 403 |
| 9 | 4.5 | 436 | 22 | 11 | 401 |
| 10 | 5 | 429 | 23 | 11.5 | 400 |
| 11 | 5.5 | 429 | 24 | 12 | 399 |
| 12 | 6 | 428 | 25 | 12.5 | 398 |
| 13 | 6.5 | 417 | 26 | 13 | 397 |

TABLE Ⅱ

体效应管在10V-13V的*f*-U曲线原始数据.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **次数** | **电压** |  | **次数** | **电压** |  |
| 1 | 10.04 | 8973 | 6 | 11.92 | 8958 |
| 2 | 10.43 | 8970 | 7 | 12.14 | 8955 |
| 3 | 10.94 | 8966 | 8 | 12.41 | 8952 |
| 4 | 11.19 | 8964 | 9 | 12.96 | 8946 |
| 5 | 11.54 | 8960 |  |  |  |

TABLE Ⅲ

不同频率下的微波输出功率原始数据.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **次数** |  |  | **次数** |  |  |
| 1 | 8.900 | 26.5 | 12 | 9.045 | 99.0 |
| 2 | 8.918 | 37.0 | 13 | 9.062 | 130.0 |
| 3 | 8.931 | 45.5 | 14 | 9.098 | 110.0 |
| 4 | 8.949 | 50.6 | 15 | 9.128 | 99.0 |
| 5 | 8.958 | 60.5 | 16 | 9.145 | 89.0 |
| 6 | 8.978 | 59.3 | 17 | 9.155 | 77.0 |
| 7 | 8.992 | 71.0 | 18 | 9.172 | 71.0 |
| 8 | 9.002 | 78.0 | 19 | 9.183 | 67.0 |
| 9 | 9.012 | 84.0 | 20 | 9.152 | 61.0 |
| 10 | 8.992 | 76.0 | 21 | 9.163 | 51.5 |
| 11 | 9.021 | 75.0 | 22 | 9.180 | 52.5 |

TABLE Ⅳ

检波示随微波频率的变化关系原始数据.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **次数** |  |  | **次数** |  |  |
| 1 | 9.000 | 5 | 14 | 9.070 | 76 |
| 2 | 9.048 | 6 | 15 | 9.072 | 67 |
| 3 | 9.053 | 11 | 16 | 9.074 | 54 |
| 4 | 9.056 | 19 | 17 | 9.076 | 43 |
| 5 | 9.058 | 25 | 18 | 9.078 | 30 |
| 6 | 9.062 | 47 | 19 | 9.081 | 17 |
| 7 | 9.064 | 60 | 20 | 9.084 | 10 |
| 8 | 9.065 | 67 | 21 | 9.086 | 7 |
| 9 | 9.068 | 80 | 22 | 9.088 | 6 |

TABLE Ⅴ

传输式谐振腔谐振曲线原始数据.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **次数** |  |  | **次数** |  |  |
| 1 | 8.995 | 0 | 14 | 9.073 | 91 |
| 2 | 9.032 | 1 | 15 | 9.075 | 89 |
| 3 | 9.050 | 3 | 16 | 9.077 | 70 |
| 4 | 9.058 | 10.5 | 17 | 9.078 | 51 |
| 5 | 9.060 | 16 | 18 | 9.080 | 32 |
| 6 | 9.062 | 21 | 19 | 9.081 | 23 |
| 7 | 9.064 | 30 | 20 | 9.083 | 14 |
| 8 | 9.065 | 40 | 21 | 9.087 | 6 |
| 9 | 9.066 | 51 | 22 | 9.090 | 3.5 |
| 10 | 9.067 | 60 | 23 | 9.095 | 2 |
| 11 | 9.068 | 71 | 24 | 9.099 | 2 |
| 12 | 9.070 | 85 | 25 | 9.120 | 0 |
| 13 | 9.072 | 90 |  |  |  |

TABLE Ⅵ

多晶共振曲线原始数据.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **次数** |  |  | **次数** |  |  |
| 1 | 148.9091 | 52.0 | 16 | 173.1005 | 28.0 |
| 2 | 159.4271 | 51.0 | 17 | 173.6264 | 33.0 |
| 3 | 164.6861 | 49.9 | 18 | 174.1523 | 38.0 |
| 4 | 165.7379 | 49.8 | 19 | 174.6782 | 40.5 |
| 5 | 166.7897 | 48.0 | 20 | 175.2041 | 42.0 |
| 6 | 167.8415 | 45.0 | 21 | 175.73 | 44.5 |
| 7 | 168.3674 | 40.0 | 22 | 176.2559 | 47.0 |
| 8 | 168.6829 | 36.0 | 23 | 176.7818 | 47.5 |
| 9 | 168.9985 | 33.0 | 24 | 177.3077 | 48.0 |
| 10 | 169.4192 | 28.0 | 25 | 178.3595 | 49.0 |
| **次数** |  |  | **次数** |  |  |
| 11 | 169.9451 | 24.0 | 26 | 179.4113 | 50.0 |
| 12 | 170.9969 | 16.0 | 27 | 180.4631 | 51.0 |
| 13 | 171.5228 | 15.0 | 28 | 183.6185 | 52.1 |
| 14 | 172.0487 | 17.0 | 29 | 186.7739 | 53.6 |
| 15 | 172.5746 | 23.0 | 30 | 190.9811 | 54.0 |

TABLE Ⅶ

. 电磁铁电流与磁场强度原始数据.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **次数** |  |  | **次数** |  |  |
| 1 | 0.000 | 0.6 | 12 | 1.125 | 229.0 |
| 2 | 0.011 | 0.8 | 13 | 1.446 | 291.0 |
| 3 | 0.033 | 11.6 | 14 | 1.692 | 336.0 |
| 4 | 0.044 | 13.7 | 15 | 1.933 | 377.0 |
| 5 | 0.093 | 22.4 | 16 | 2.116 | 406.0 |
| 6 | 0.125 | 28.3 | 17 | 2.218 | 421.0 |
| 7 | 0.201 | 43.0 | 18 | 2.452 | 448.0 |
| 8 | 0.270 | 57.0 | 19 | 2.637 | 467.0 |
| 9 | 0.429 | 89.0 | 20 | 2.743 | 471.0 |
| 10 | 0.641 | 132.0 | 21 | 2.824 | 478.0 |
| 11 | 0.955 | 198.0 | 22 | 1.125 | 229.0 |
|  |  |  |  |  |  |