*Snimanje karakteristika dioda*

PRIPREMA MAKETE Prilikom izrade ove vežbe koristi se ispravljač napona, maketa, otpornik 180Ω, sedam dioda i dva merna instrumenta (voltmetar i ampermetar). Odmah na početku, a pre priključivanja na maketu, voltmetar je potrebno postaviti na opseg 20V, a ampermetar na opseg 20mA. Pomoću makte i potrebnih komponenata sastaviti električnu šema kola koja je data je na slici 2. Potenciometar za promenu napona napajanja makete treba okrenuti u krajnji levi položaj. Priključiti ampermetar i voltmetar.

IZRADA VEŽBE Potenciometar za promenu napona napajanja makete lagano okretati udesno dok se na voltmetru ne očita potreban napon (vidi tabele). Zatim zapisati očitanu vrednost struje prikazanu na ampermetru. Po završetku snimanja karakteristike jedne diode smanjiti napon napajanja na 0V, promeniti diodu i i ponoviti postupak snimanja karakteristike .

Germanijumska dioda

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Id(mA) |  |  |  |  |  |  |  |
| Vd(V) | 0 | 0.15 | 0.2 | 0.25 | 0.3 | 0.35 | 0.4 |

Šotki dioda

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Id(mA) |  |  |  |  |  |  |  |
| Vd(V) | 0.3 | 0.33 | 0.37 | 0.4 | 0.43 | 0.47 | 0.5 |

Silicijumska dioda

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Id(mA) |  |  |  |  |  |  |  |
| Vd(V) | 0.45 | 0.55 | 0.6 | 0.62 | 0.64 | 0.66 | 0.67 |

Crvena LED dioda

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Id(mA) |  |  |  |  |  |  |  |
| Vd(V) |  |  |  |  |  |  |  |

Zelena LED dioda

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Id(mA) |  |  |  |  |  |  |  |
| Vd(V) |  |  |  |  |  |  |  |

Žuta LED dioda

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Id(mA) |  |  |  |  |  |  |  |
| Vd(V) |  |  |  |  |  |  |  |

Zener dioda

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Id(mA) |  |  |  |  |  |  |  |
| Vd(V) |  |  |  |  |  |  |  |