

Input the p-side doping,  $N_A = 1e15$

Input the n-side doping,  $N_D = 1e15$

$V_0 =$

0.5754

Bias voltage,  $V$  (Smaller than  $V_0$  for forward bias) = 0.5

#### COMPUTATIONAL RESULTS

$N_A =$

1.0000e+15

$N_D =$

1.0000e+15

$V =$

0.5000

$V_0 =$

0.5754

$x_n =$

2.2184e-05

$x_p =$

2.2184e-05

$W =$

4.4368e-05

$E_0 =$

-3.3973e+03

Input the p-side doping,  $N_A = 1e15$

Input the n-side doping,  $N_D = 1e15$

$V_0 =$

0.5754

Bias voltage,  $V$  (Smaller than  $V_0$  for forward bias) = 0

COMPUTATIONAL RESULTS

$N_A =$

1.0000e+15

$N_D =$

1.0000e+15

$V =$

0

$V_0 =$

0.5754

$x_n =$

6.1295e-05

$x_p =$

6.1295e-05

$W =$

1.2259e-04

$E_0 =$

-9.3869e+03

Input the p-side doping,  $N_A = 1e15$

Input the n-side doping,  $N_D = 1e15$

$V_0 =$

0.5754

Bias voltage,  $V$  (Smaller than  $V_0$  for forward bias) = -10

COMPUTATIONAL RESULTS

$N_A =$

1.0000e+15

$N_D =$

1.0000e+15

$V =$

-10

$V_0 =$

0.5754

$x_n =$

2.6278e-04

$x_p =$

2.6278e-04

$W =$

5.2557e-04

$E_0 =$

-4.0244e+04

Input the p-side doping,  $N_A = 1e16$

Input the n-side doping,  $N_D = 1e16$

$V_0 =$

0.6946

Bias voltage,  $V$  (Smaller than  $V_0$  for forward bias) = 0.5

#### COMPUTATIONAL RESULTS

$N_A =$

1.0000e+16

$N_D =$

1.0000e+16

$V =$

0.5000

$V_0 =$

0.6946

$x_n =$

1.1274e-05

$x_p =$

1.1274e-05

$W =$

2.2547e-05

$E_0 =$

-1.7265e+04

Input the p-side doping,  $N_A = 1e16$

Input the n-side doping,  $N_D = 1e16$

$V_0 =$

0.6946

Bias voltage,  $V$  (Smaller than  $V_0$  for forward bias) = 0

#### COMPUTATIONAL RESULTS

$N_A =$

1.0000e+16

$N_D =$

1.0000e+16

$V =$

0

$V_0 =$

0.6946

$x_n =$

2.1298e-05

$x_p =$

2.1298e-05

$W =$

4.2595e-05

$E_0 =$

-3.2616e+04

Input the p-side doping,  $N_A = 1e16$

Input the n-side doping,  $N_D = 1e16$

$V_0 =$

0.6946

Bias voltage,  $V$  (Smaller than  $V_0$  for forward bias) = -10

#### COMPUTATIONAL RESULTS

$N_A =$

1.0000e+16

$N_D =$

1.0000e+16

$V =$

-10

$V_0 =$

0.6946

$x_n =$

8.3567e-05

$x_p =$

8.3567e-05

$W =$

1.6713e-04

$E_0 =$

-1.2798e+05

Input the p-side doping,  $N_A = 1e17$

Input the n-side doping,  $N_D = 1e17$

$V_0 =$

0.8139

Bias voltage,  $V$  (Smaller than  $V_0$  for forward bias) = 0.5

#### COMPUTATIONAL RESULTS

$N_A =$

1.0000e+17

$N_D =$

1.0000e+17

$V =$

0.5000

$V_0 =$

0.8139

$x_n =$

4.5275e-06

$x_p =$

4.5275e-06

$W =$

9.0550e-06

$E_0 =$

-6.9335e+04

Input the p-side doping,  $N_A = 1e17$

Input the n-side doping,  $N_D = 1e17$

$V_0 =$

0.8139

Bias voltage,  $V$  (Smaller than  $V_0$  for forward bias) = 0

COMPUTATIONAL RESULTS

$N_A =$

1.0000e+17

$N_D =$

1.0000e+17

$V =$

0

$V_0 =$

0.8139

$x_n =$

7.2902e-06

$x_p =$

7.2902e-06

$W =$

1.4580e-05

$E_0 =$

-1.1164e+05



Input the p-side doping,  $N_A = 1e17$

Input the n-side doping,  $N_D = 1e17$

$V_0 =$

0.8139

Bias voltage,  $V$  (Smaller than  $V_0$  for forward bias) = -10

COMPUTATIONAL RESULTS

$N_A =$

1.0000e+17

$N_D =$

1.0000e+17

$V =$

-10

$V_0 =$

0.8139

$x_n =$

2.6573e-05

$x_p =$

2.6573e-05

$W =$

5.3146e-05

$E_0 =$

-4.0695e+05

Input the p-side doping,  $N_A = 1e18$

Input the n-side doping,  $N_D = 1e18$

$V_0 =$

0.9332

Bias voltage,  $V$  (Smaller than  $V_0$  for forward bias) = 0.5

COMPUTATIONAL RESULTS

$N_A =$

1.0000e+18

$N_D =$

1.0000e+18

$V =$

0.5000

$V_0 =$

0.9332

$x_n =$

1.6819e-06

$x_p =$

1.6819e-06

$W =$

3.3637e-06

$E_0 =$

-2.5757e+05

Input the p-side doping,  $N_A = 1e18$

Input the n-side doping,  $N_D = 1e18$

$V_0 =$

0.9332

Bias voltage,  $V$  (Smaller than  $V_0$  for forward bias) = 0

COMPUTATIONAL RESULTS

$N_A =$

1.0000e+18

$N_D =$

1.0000e+18

$V =$

0

$V_0 =$

0.9332

$x_n =$

2.4685e-06

$x_p =$

2.4685e-06

$W =$

4.9370e-06

$E_0 =$

-3.7804e+05

Input the p-side doping,  $N_A = 1e18$

Input the n-side doping,  $N_D = 1e18$

$V_0 =$

0.9332

Bias voltage,  $V$  (Smaller than  $V_0$  for forward bias) = -10

COMPUTATIONAL RESULTS

$N_A =$

1.0000e+18

$N_D =$

1.0000e+18

$V =$

-10

$V_0 =$

0.9332

$x_n =$

8.4494e-06

$x_p =$

8.4494e-06

$W =$

1.6899e-05

$E_0 =$

-1.2940e+06

Input the p-side doping,  $N_A = 1e15$

Input the n-side doping,  $N_D = 1e18$

$V_0 =$

0.7543

Bias voltage,  $V$  (Smaller than  $V_0$  for forward bias) = 0.5

#### COMPUTATIONAL RESULTS

$N_A =$

1.0000e+15

$N_D =$

1.0000e+18

$V =$

0.5000

$V_0 =$

0.7543

$x_n =$

5.7597e-08

$x_p =$

5.7597e-05

$W =$

5.7655e-05

$E_0 =$

-8.8207e+03

Input the p-side doping,  $N_A = 1e15$

Input the n-side doping,  $N_D = 1e18$

$V_0 =$

0.7543

Bias voltage,  $V$  (Smaller than  $V_0$  for forward bias) = 0

COMPUTATIONAL RESULTS

$N_A =$

1.0000e+15

$N_D =$

1.0000e+18

$V =$

0

$V_0 =$

0.7543

$x_n =$

9.9201e-08

$x_p =$

9.9201e-05

$W =$

9.9300e-05

$E_0 =$

-1.5192e+04

Input the p-side doping,  $N_A = 1e15$

Input the n-side doping,  $N_D = 1e18$

$V_0 =$

0.7543

Bias voltage,  $V$  (Smaller than  $V_0$  for forward bias) = -10

COMPUTATIONAL RESULTS

$N_A =$

1.0000e+15

$N_D =$

1.0000e+18

$V =$

-10

$V_0 =$

0.7543

$x_n =$

3.7458e-07

$x_p =$

3.7458e-04

$W =$

3.7495e-04

$E_0 =$

-5.7364e+04

Input the p-side doping,  $N_A = 1e18$

Input the n-side doping,  $N_D = 1e15$

$V_0 =$

0.7543

Bias voltage,  $V$  (Smaller than  $V_0$  for forward bias) = 0.5

#### COMPUTATIONAL RESULTS

$N_A =$

1.0000e+18

$N_D =$

1.0000e+15

$V =$

0.5000

$V_0 =$

0.7543

$x_n =$

5.7597e-05

$x_p =$

5.7597e-08

$W =$

5.7655e-05

$E_0 =$

-8.8207e+03



Input the p-side doping,  $N_A = 1e18$

Input the n-side doping,  $N_D = 1e15$

$V_0 =$

0.7543

Bias voltage,  $V$  (Smaller than  $V_0$  for forward bias) = 0

COMPUTATIONAL RESULTS

$N_A =$

1.0000e+18

$N_D =$

1.0000e+15

$V =$

0

$V_0 =$

0.7543

$x_n =$

9.9201e-05

$x_p =$

9.9201e-08

$W =$

9.9300e-05

$E_0 =$

-1.5192e+04

Input the p-side doping,  $N_A = 1e18$

Input the n-side doping,  $N_D = 1e15$

$V_0 =$

0.7543

Bias voltage,  $V$  (Smaller than  $V_0$  for forward bias) = -10

COMPUTATIONAL RESULTS

$N_A =$

1.0000e+18

$N_D =$

1.0000e+15

$V =$

-10

$V_0 =$

0.7543

$x_n =$

3.7458e-04

$x_p =$

3.7458e-07

$W =$

3.7495e-04

$E_0 =$

-5.7364e+04