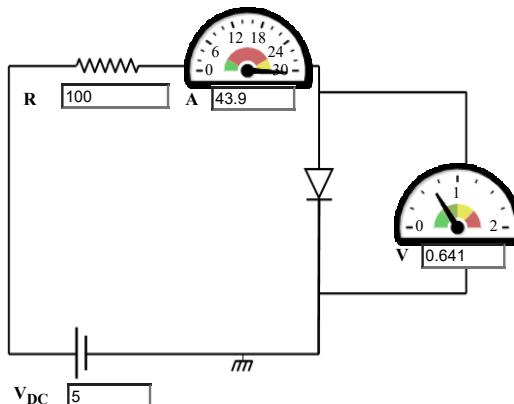


Forward Bias Silicon Diode

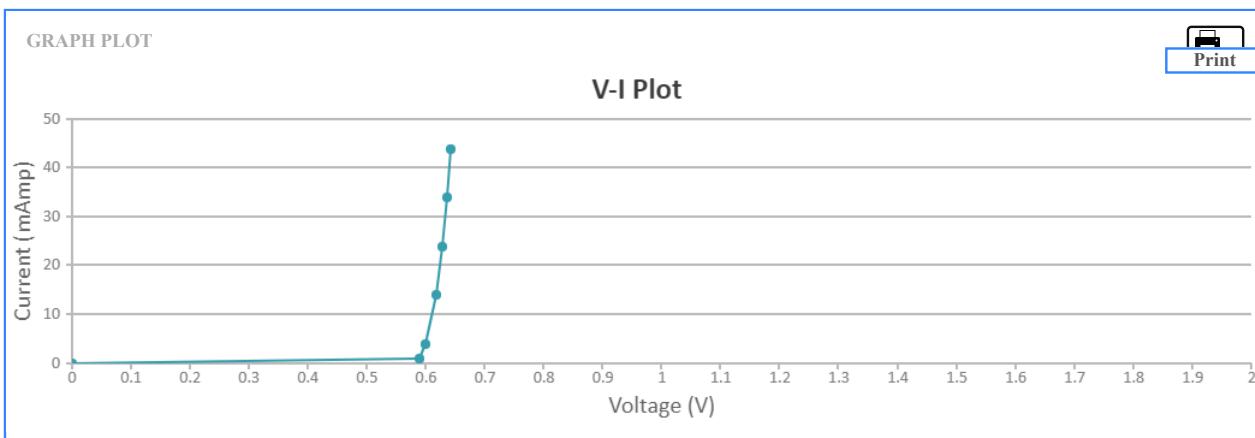
INSTRUCTION

EXPERIMENTAL TABLE		
Serial No.	Forward Voltage(Volt)	Forward Current(mAmp)
1	0	0
2	0.589	0.997
3	0.599	3.99
4	0.617	14.0
5	0.627	23.9
6	0.635	33.9
7	0.641	43.9


CONTROLS

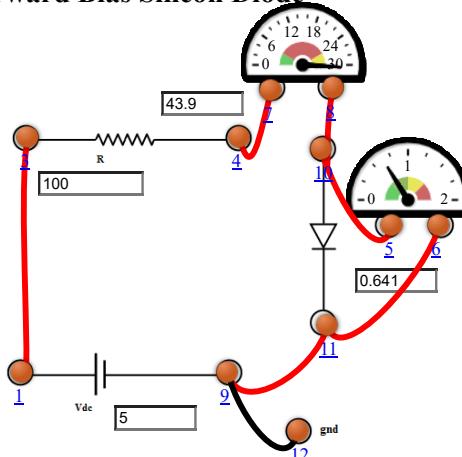
Select Diode: 1N4007 Volt
 DC volt :

Add to Table

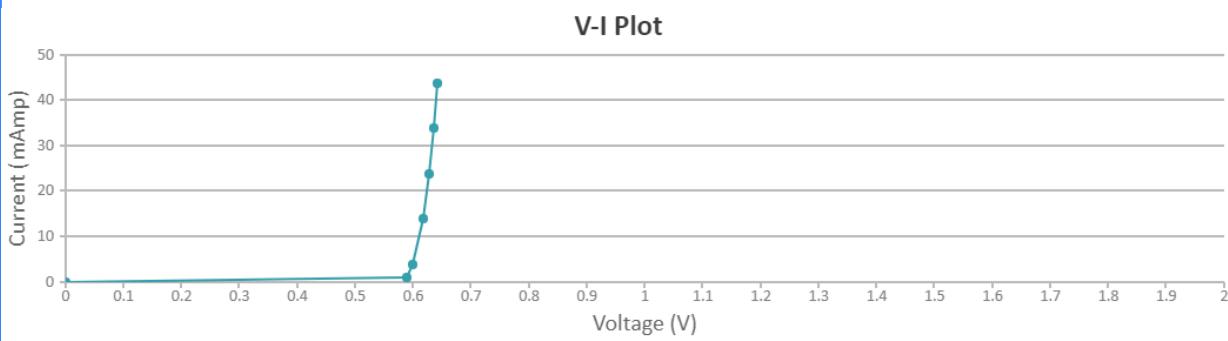


INSTRUCTION**EXPERIMENTAL TABLE**

Serial No.	Forward Voltage(Volt)	Forward Current(mAmp)
1	0	0
2	0.589	0.997
3	0.599	3.99
4	0.617	14.0
5	0.627	23.9
6	0.635	33.9
7	0.641	43.9

Forward Bias Silicon Diode**CONTROLS**

Select Diode: 1N4007 0.6 Volt
 DC volt : ohms

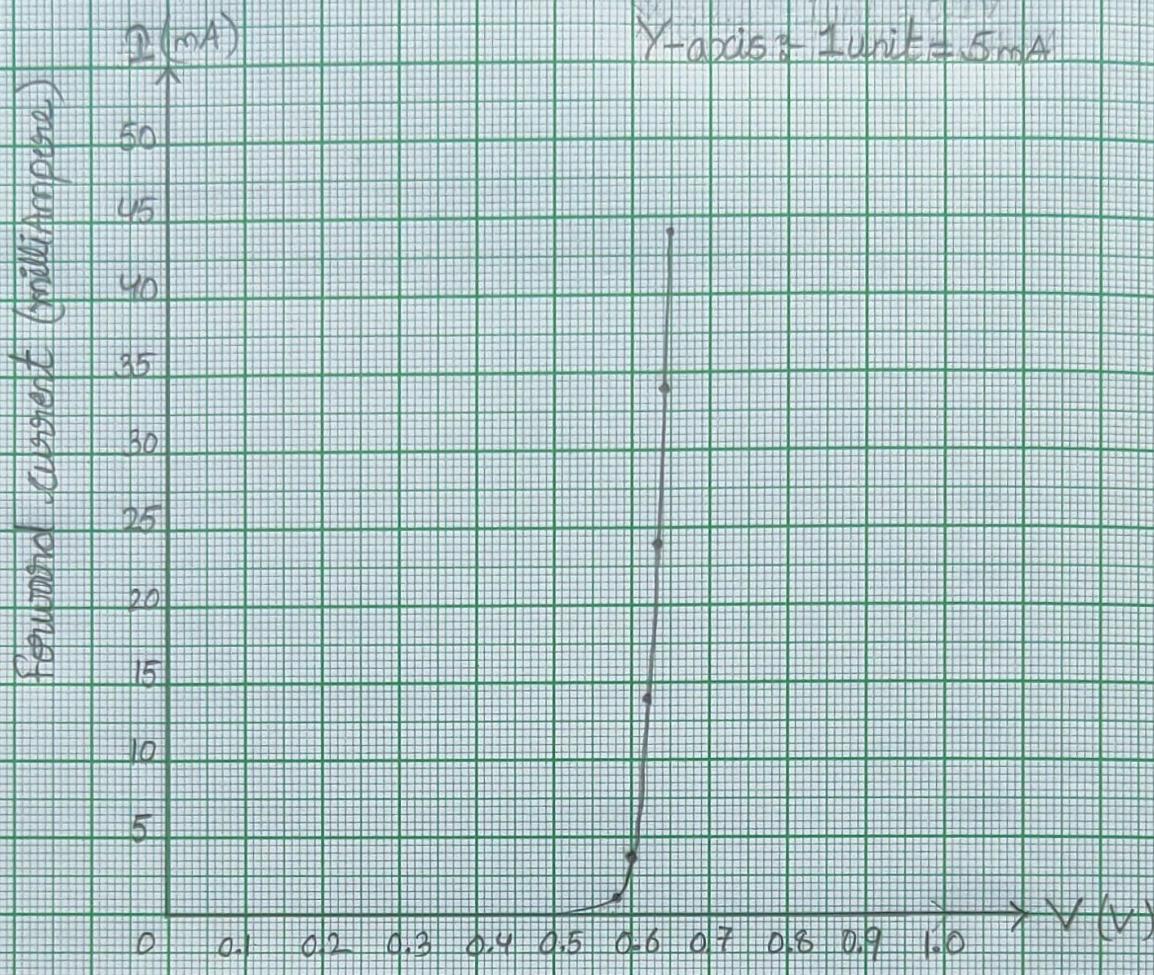
Print It**GRAPH PLOT**

V-I Characteristics of silicon
Diode in forward bias

Scales-

X-axis: 1 unit = 0.1V

Y-axis: 1 unit = 5mA



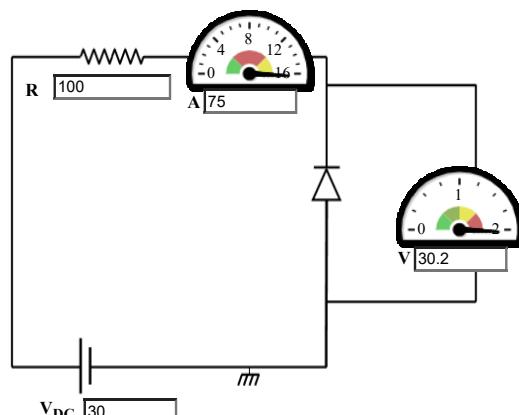
Forward voltage (volt)

Reverse Bias – Silicon Diode

INSTRUCTION

EXPERIMENTAL TABLE

Serial No.	Reverse Voltage(Volt)	Reverse Current(μ Amp)
1	0.170	0.100
2	0.530	0.100
3	4.75	0.100
4	9.71	0.100
5	14.8	0.100
6	19.9	0.100
7	25.0	0.100
8	30.1	0.100
9	30.2	75

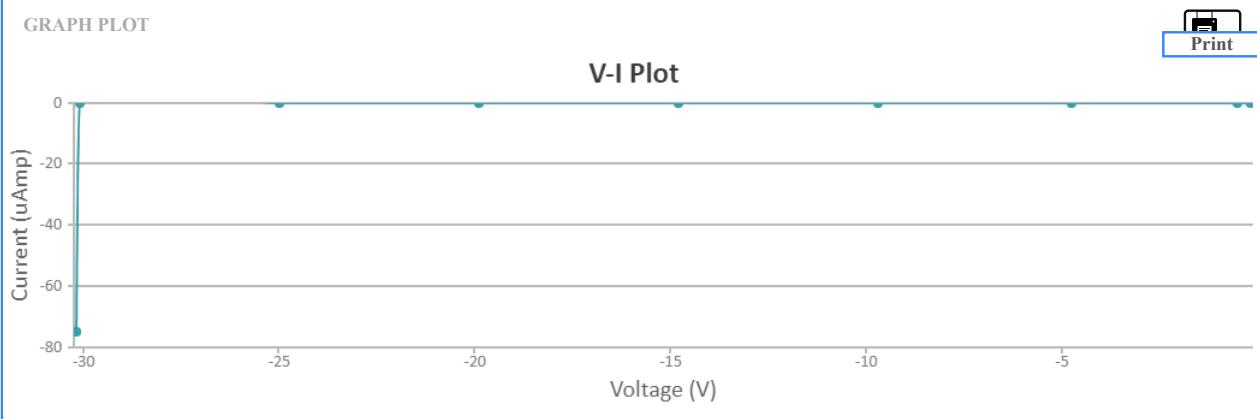


CONTROLS

Select Diode: 1N4007 Volt
DC volt :

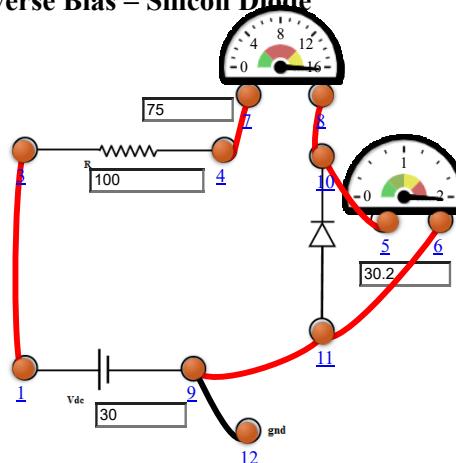
[Print It](#)

GRAPH PLOT



INSTRUCTION

EXPERIMENTAL TABLE		
Serial No.	Reverse Voltage(Volt)	Reverse Current(μ Amp)
1	0.170	0.100
2	0.530	0.100
3	4.75	0.100
4	9.71	0.100
5	14.8	0.100
6	19.9	0.100
7	25.0	0.100
8	30.1	0.100
9	30.2	75

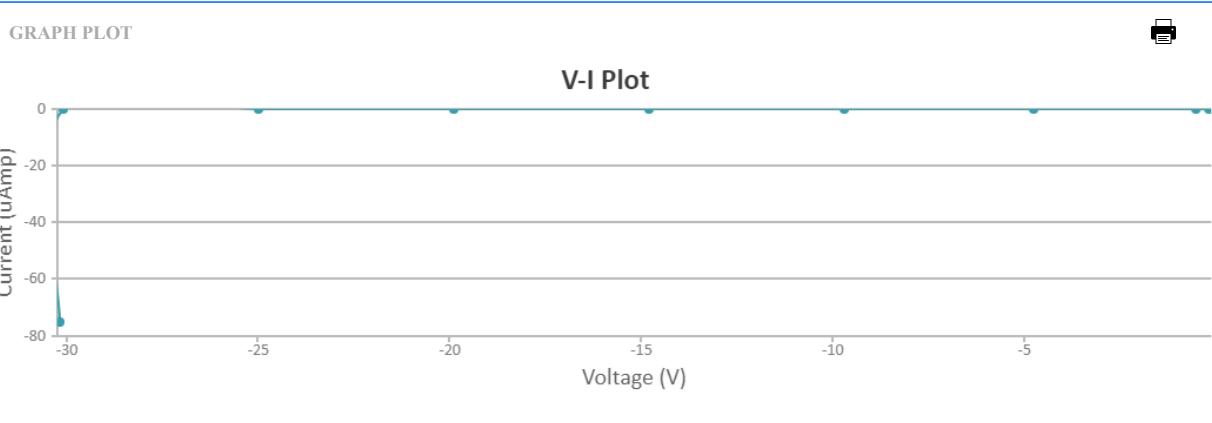
Reverse Bias – Silicon Diode

CONTROLS

Select Diode: 1N4007 V_R Volt
 DC volt : Volt
 Resistance : ohms

Add to Table Plot Clear

Check connection Delete all connection

Print It



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V-I characteristics of silicon diode in Reverse bias

Scal:

X-axis: 1 unit = 3V

Y-axis: 1 unit = $10\mu A$

Reverse Voltage (volt)

$-V_R$ < 30 -27 -24 -21 -18 -15 -12 -9 -6 -3 0

Reverse current (microampere)
 $-I_R(\mu A)$

-10
-20
-30
-40
-50
-60
-70
-80
-90