

Understanding Characteristics of DIAC, TRIAC & SCR

Nvis 6530A

TECHBOOK



Nvis 6530A Understanding Characteristics of DIAC, TRIAC & SCR is remarkable and frequently used laboratory equipment which is designed to explain fundamentals and working of DIAC, TRIAC & SCR.

By using this product student can understand the basic concept of DIAC, TRIAC & SCR which are the basic devices used in Power Electronics. V-I Characteristics can be drawn by the student which helps them to understand the behavior of these devices easily. This product has suitable in-built power supply and on-board resistor of different values. Breadboard area allows construction of circuits using external components along with on - board resources.

Features

- Generalized design
- In-built Power supply of +15, +35V and -35V
- DPM Based highly preceised on-board Voltmeter & Ammeter
- Breadboard
- Provided with different values of resistances
- 10 turn potentiometer
- Online product turotial



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Scope of Learning

- To study and plot the V-I Characteristics of DIAC with Positive and Negative biasing
- * Study and observation of Break over voltage (V $_{\scriptscriptstyle BO}$) and V $_{\scriptscriptstyle BO}$ Symmetry of DIAC
- To study and plot the V-I Characteristic of TRIAC with Positive and Negative biasing
- Study of Gate Current Triggering of TRIAC
- To study the phenomena of Holding Current and Latching current in TRIAC
- To Study and plot V-I Characteristic of SCR
- Study of Gate Current Triggering of SCR
- To study the phenomenon of holding current and latching current in SCR

Technical Specifications

Mains power supply	: 90-270V±10%, 50Hz
Fixed DC power supply	: +15V, Regulated
	+35V, Regulated
	-35V, Regulated
Bread Board	
Dimension (mm)	:75x61x10
Distribution strips	: 2
Terminal strips	: 1
Distribution holes	: 200
Terminal holes	: 640
DIAC	: DB3
TRIAC	: BT136
SCR	: TYN616
Resistor Bank	
M.F.R. 2.2K 1% 1/4W (3 Nos.)	
M.F.R. 470E 1% 1/4W (3 Nos.)	
M.F.R. 1K 1% 5W (3 Nos.)	
M.F.R. 4.7K 1% 5W (3 Nos.)	
M.F.R. 1K 1% 10W (3 Nos.)	
Variable Resistance bank	
5K 10 turn Potentiometer (2 Nos.)	
Voltmeter Range	: 0V to 99V
Ammeter Range	: 0mA to 20mA
Weight	: 2.5kg (approximate)
Dimensions (mm)	: W 350 x D 280 x H 55