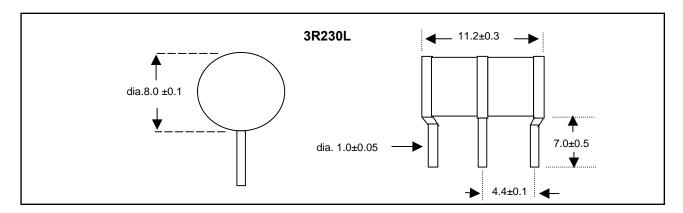


## **HAKEL GAS DISCHARGE TUBES - SALIENT FEATURES**

- \* Stable breakdown voltage
- \* High insulation resistance; enables the use in high temperature and humidity
- \* Small capacitance; minimises transmission loss and noise even with high frequency range
- \* High durability against surges and fast restorability
- \* Long life
- \* Free of radioactive substance
- \* Inexpensive for superior performance
- \* High mechanical strength prevents leak and breakdown from strong shock
- \* Various types available



Type	3 TERMINAL CERAMIC TYPE GD TUBE - 3R230L		
SI. No.	Description	Test Condition	Specification
ELECTRICAL CHARACTERISTICS, Test Methods as per ITU-T (CCITT) K.12			
1	D.C Spark-Over Voltage	100V/Sec	230 ±20%
2	Impulse Spark-Over Voltage	100V/µsec	<500V
3	Impulse Spark-Over Voltage	1000V/µsec	<650V
4	Impulse Transverse Delay	1000 V/μ sec	< 75ns
5	Insulation Resistance	100V	>10 <sup>10</sup> Ohm
6	Glow Voltage	10 mA	< 70 V
7	Arc Voltage	2 A	< 10 V
8	Capacitance	1 M Hz	< 1.5 pF
9	DC Holdover Voltage	135 V	< 150 ms
10	Impulse Discharge Current	10000 A, 8/20µsec	10 Operations
		200 A, 10/700µsec	500 Operations
		200 A, 10/1000µsec	300 Operations
11	Alternating Discharge Current	10 A r.m.s, 1 sec	10 Operations

## NOTES:

- 1. All dimensions are in mm
- 2. Electrodes are nickel plated where as all lead terminals are Tin plated.
- 3. Marking on the GD Tube

3R230L

3:3 Terminal GD Tube

R: Dimension 230: 230 Volts L: With leads

HAKEL: Manufacturer

MM : Month of manufacture YY : Year of manufacture

- 4. This model can be supplied without Leads, namely 3R230
- 5. Blister Packing