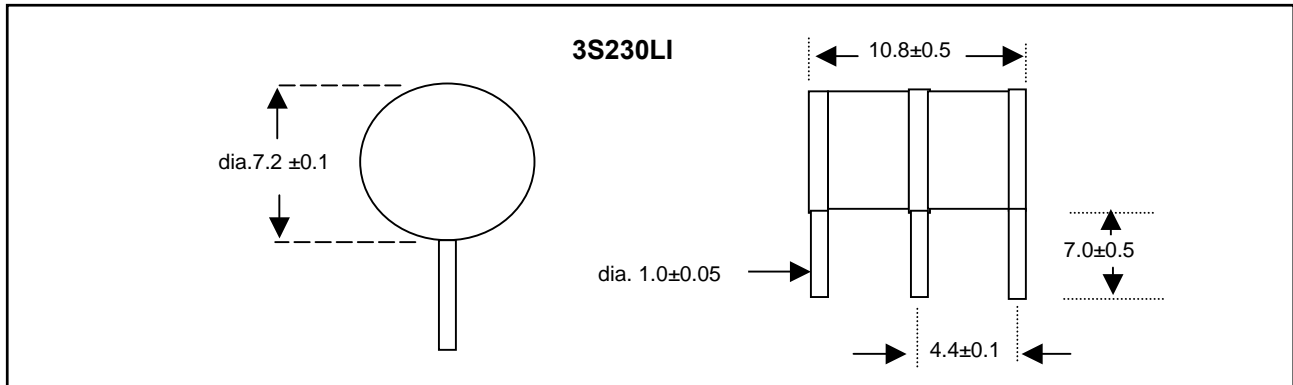


**HAKEL GAS DISCHARGE TUBES - SALIENT FEATURES**

- \* 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 - 3S230LI	
Sl. No.	Description	Test Condition	Specification
<b>ELECTRICAL CHARACTERISTICS, Test Methods as per ITU-T (CCITT) K.12</b>			
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
  - 3S230L
  - 3 : 3 Terminal GD Tube
  - S : Dimension
  - 230 : 230 Volts
  - L : With leads
  - HAKEL : Manufacturer
  - MM : Month of manufacture
  - YY : Year of manufacture
4. The above model is also available with fail safe mechanism which is named as 3S230LIF
5. This model can be supplied without Leads, namely 3S230
6. Blister Packing