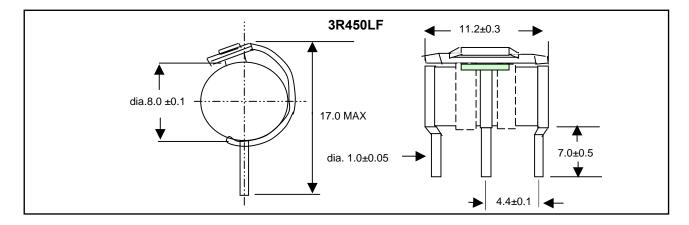


HAKEL GAS DISCHARGE TUBES - SALIENT FEATURES

- * 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 - 3R450LF			
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	450 ±20%	
2	Impulse Spark-Over Voltage	100V/µsec	<1100V	
3	Impulse Spark-Over Voltage	1000V/µsec	<1200V	
4	Impulse Transverse Delay	1000 V/μ sec	< 75ns	
5	Insulation Resistance	100V	>10 ¹⁰ 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	
12	Fail-safe Operating Time	10 A r.m.s.	< 5 Sec.	

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

3R450LF

3:3 Terminal GD Tube

R: Dimension 450: 450 Volts L: With leads

F: With Fail-safe Mechanism

HAKEL: Manufacturer

MM : Month of manufacture YY : Year of manufacture

4. This model can be supplied without Leads, namely 3R450F

5. Blister Packing