

## DATA SHEET

### GAS DISCHARGE TUBE – 2R-8\*8 SERIES

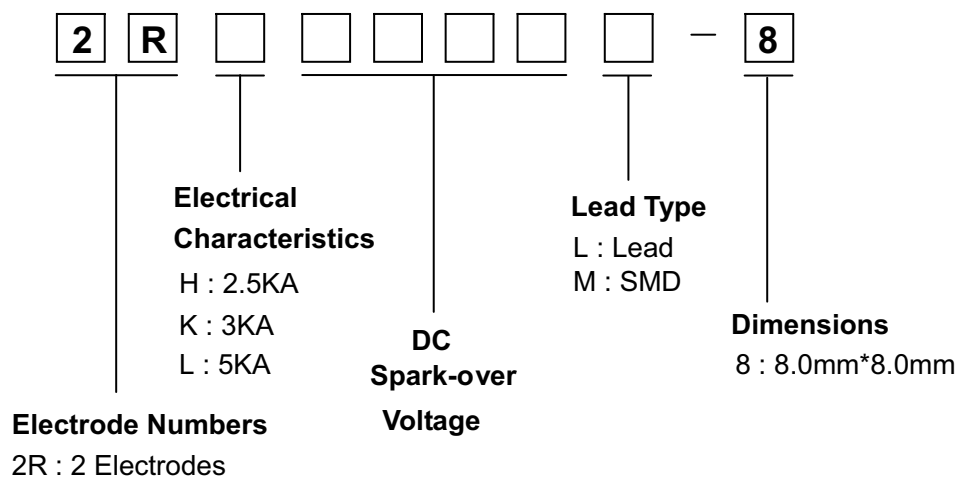
#### FEATURES

- ✧ Provide ultra-fast response to surge voltage from slow-rising surge of 100V/s to rapid-rising surge of 1KV/ $\mu$ s.
- ✧ Stable breakdown voltage.
- ✧ High insulation resistance.
- ✧ Low capacitance ( $\leq 1.5\text{pF}$ ).
- ✧ High holdover voltage.
- ✧ Large absorbing transient current capability.
- ✧ Micro-Gap Design
- ✧ SIZE : 8\*8mm
- ✧ Storage and operational temperature:  $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
- ✧ Meets MSL level 1, per J -STD-020

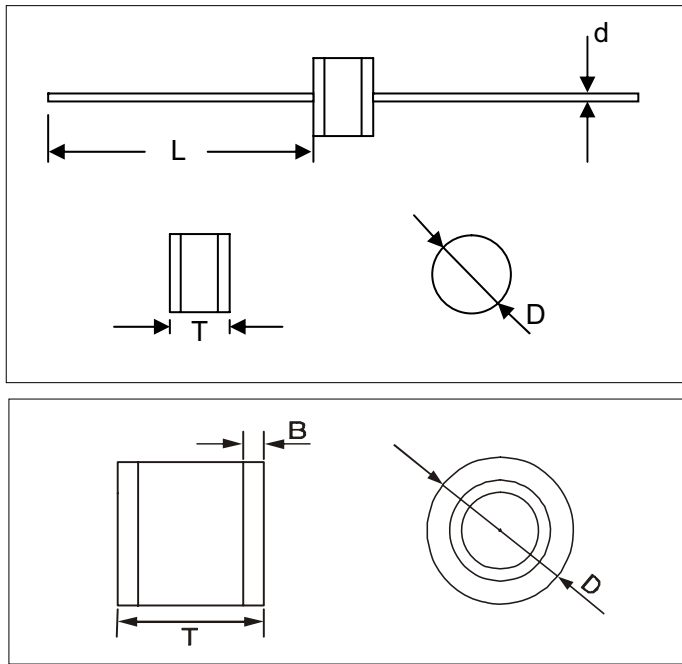
#### APPLICATION

- ✧ Repeaters, Modems.
- ✧ Telephone Interface, Line cards.
- ✧ Data communication equipment.
- ✧ Line test equipment.

#### PART NUMBER CODE



**DIMENSIONS**



unit :mm

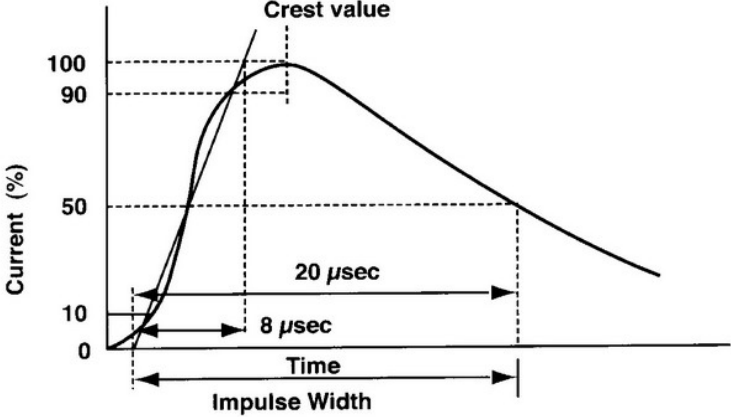
Items	Dimension	
	Spec.	Tolerance
D	8.0	+0.3,-0.5
T	8.0	+0.6,-0.1
d	0.8	±0.05
	1.0	±0.05
L	30.0	Max.
D	8.0	+0.3,-0.5
T	8.0	+0.6,-0.1
B	1.1	±0.4

**ELECTRICAL CHARACTERISTIC**

Part Number		DC Spark-over Voltage	Maximum Impulse Breakdown Voltage	Nominal Impulse Discharge Current	Alternating Discharge Current	Impulse Life	Minimum Insulation Resistance		Maximum Capacitance	Device Marking Code
		100V/s	1000V/μs	8/20μs 10times	50Hz, 1sec	10/1000μs 100A	Test Voltage	(GΩ)	1MHz	
		(V)	(V)	(KA)	(A)	(times)	DC(V)		(pF)	
2RH1400L-8	2RH1400M-8	1400±20%	2200	2.5	2.5	100	500	1.0	1.5	2RH1400-8
2RH1600L-8	2RH1600M-8	1600±20%	2400	2.5	2.5	100	500	1.0	1.5	2RH1600-8
2RH2000L-8	2RH2000M-8	2000±20%	2800	2.5	2.5	100	500	1.0	1.5	2RH2000-8
2RH2500L-8	2RH2500M-8	2500±20%	3600	2.5	2.5	100	500	1.0	1.5	2RH2500-8
2RH2700L-8	2RH2700M-8	2700±20%	3800	2.5	2.5	300*	1000	1.0	1.5	2RH2700-8
2RH3000L-8	2RH3000M-8	3000±20%	4200	2.5	2.5	100	1000	1.0	1.5	2RH3000-8
2RH3500L-8	2RH3500M-8	3500±20%	5000	2.5	2.5	100	1000	1.0	1.5	2RH3500-8
2RK2700L-8	2RK2700M-8	2700±20%	3800	3.0	3.0	300*	1000	1.0	1.5	2RK2700-8
2RK3000L-8	2RK3000M-8	3000±20%	4200	3.0	3.0	300*	1000	1.0	1.5	2RK3000-8
2RK3500L-8	2RK3500M-8	3500±20%	5000	3.0	3.0	100	1000	1.0	1.5	2RK3500-8
2RK4000L-8	2RK4000M-8	4000±20%	5500	3.0	3.0	100	1000	1.0	1.5	2RK4000-8
2RK5000L-8	2RK5000M-8	5000±20%	6400	3.0	3.0	100	1000	1.0	1.5	2RK5000-8
2RK6000L-8	2RK6000M-8	6000±20%	7800	3.0	3.0	100	1000	1.0	1.5	2RK6000-8
2RL1000L-8	2RL1000M-8	1000±20%	1400	5.0	5.0	100	500	1.0	1.5	2RL1000-8
2RL1400L-8	2RL1400M-8	1400±20%	2200	5.0	5.0	100	500	1.0	1.5	2RL1400-8
2RL1600L-8	2RL1600M-8	1600±20%	2400	5.0	5.0	100	500	1.0	1.5	2RL1600-8
2RL2000L-8	2RL2000M-8	2000±20%	2800	5.0	5.0	100	500	1.0	1.5	2RL2000-8
2RL2500L-8	2RL2500M-8	2500±20%	3600	5.0	5.0	100	1000	1.0	1.5	2RL2500-8

\*Measured with an 8/20μs waveform , 100A

**ELECTRICAL RATING**

Item	Test Condition / Description	Requirement
DC Spark-over Voltage	The voltage is measured with a low rate of rise $dv / dt=100V/s$	
Maximum Impulse Spark-over Voltage	The maximum impulse breakdown voltage is measured with a rise time of $dv / dt=1000V/\mu s$	
Impulse Discharge Current	<p>The maximum current applying a waveform of 8/20<math>\mu s</math> that can be applied across the terminals of the gas tube without causing the gas tube to change more than <math>\pm 25\%</math> from its initial measured DC breakdown voltage. Dwell time between pulses is 3 minutes.</p> 	To meet the specified value
Alternating Discharge Current	<p>Rated RMS value of AC current at 50Hz, 1 sec. 10 times. Intervals: 3min. DC breakdown voltage may not change more than <math>\pm 25\%</math> from its initial measured DC breakdown voltage. <math>IR &gt; 10^8</math> ohms (-20%, +30% for 70 – 90V).</p>	
Insulation Resistance	The resistance of gas tube shall be measured each terminal each other terminal. please see above spec	
Capacitance	<p>The capacitance of gas tube shall be measured each terminal to each other terminal. Test frequency : 1MHz</p>	