

## DATA SHEET

### GAS DISCHARGE TUBE – 2R-4 SERIES

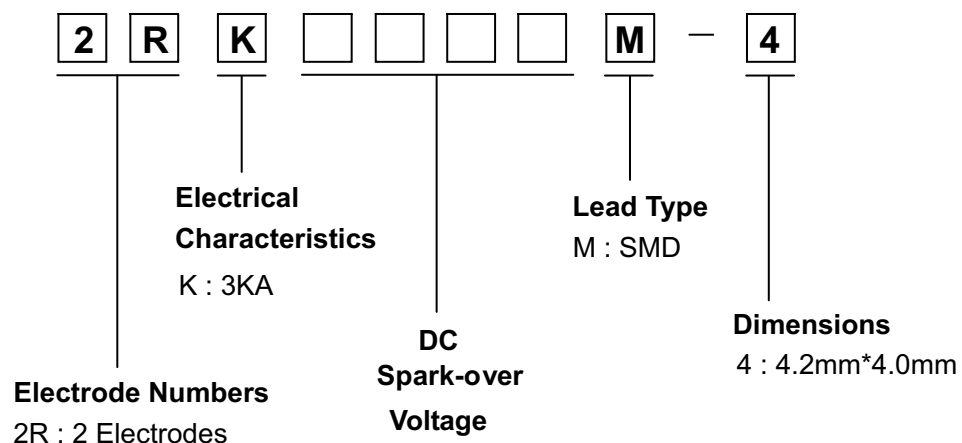
#### FEATURES

- ◇ Provide ultra-fast response to surge voltage from slow-rising surge of 100V/s to rapid-rising surge of 1KV/μs.
- ◇ Stable breakdown voltage.
- ◇ High insulation resistance.
- ◇ Low capacitance (≤1pF).
- ◇ High holdover voltage.
- ◇ Large absorbing transient current capability.
- ◇ Micro-Gap Design
- ◇ Size:4.2mm\*4.0mm
- ◇ Storage and operational temperature: -40°C ~ +85°C
- ◇ Meets MSL level 1, per J -STD-020

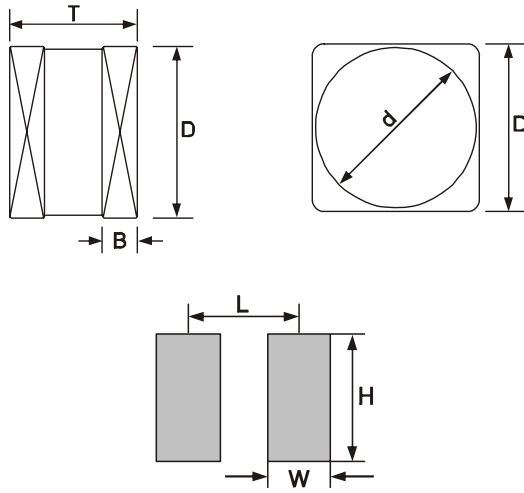
#### APPLICATION

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

#### PART NUMBER CODE



**DIMENSIONS**



**Recommended Pad Size**

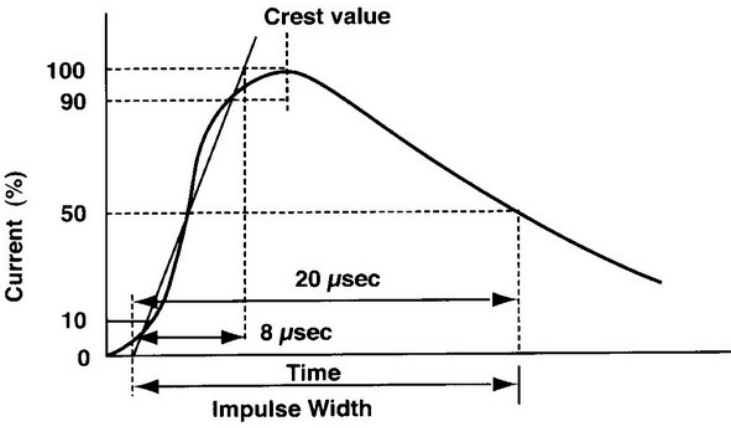
unit :mm

Items	Dimension	
	Spec.	Tolerance
D	4.2	±0.5
T	4.0	±0.4
B	0.4	±0.1
d	3.9	±0.1
L	3.5	-
H	5.0	-
W	1.3	-

**ELECTRICAL CHARACTERISTIC**

Part Number	DC Spark-over Voltage	Maximum Impulse Spark-over 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)	
2RK075M-4	75±20%	800	3	3	300	25	1	1.0	075
2RK090M-4	90±20%	800	3	3	300	50	1	1.0	090
2RK145M-4	145±20%	800	3	3	300	100	1	1.0	145
2RK230M-4	230±20%	700	3	3	300	100	1	1.0	230
2RK250M-4	250±20%	700	3	3	300	100	1	1.0	250
2RK300M-4	300±20%	800	3	3	300	100	1	1.0	300
2RK350M-4	350±20%	850	3	3	300	100	1	1.0	350
2RK400M-4	400±20%	900	3	3	300	100	1	1.0	400
2RK470M-4	470±20%	800	3	3	300	250	1	1.0	470
2RK600M-4	600±20%	1100	3	3	300	250	1	1.0	600
2RK800M-4	800±20%	1200	3	3	300	250	1	1.0	800
2RK1000M-4	1000±20%	1500	3	3	300	500	1	1.0	1000
2RK1200M-4	1200±20%	1900	3	3	300	500	1	1.0	1200

**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>  <p>The graph shows Current (%) on the y-axis (0, 10, 50, 90, 100) and Time on the x-axis. The curve starts at 0, rises to a peak labeled 'Crest value' at 100% at 8 <math>\mu s</math>. A horizontal dashed line at 50% current intersects the curve, and a vertical dashed line drops from that point to the x-axis, marking the end of a 20 <math>\mu s</math> interval. The 8 <math>\mu s</math> interval is marked from the start of the curve to the peak. The total duration of the pulse is labeled 'Impulse Width'.</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>	