

# DATA SHEET

## GAS DISCHARGE TUBES TELEPHONE INTERFACE

2R-6 series

RoHS compliant & free



Product specification— February 02, 2021 V.1



## Gas Discharge Tube (GDT) Data Sheet

### Features

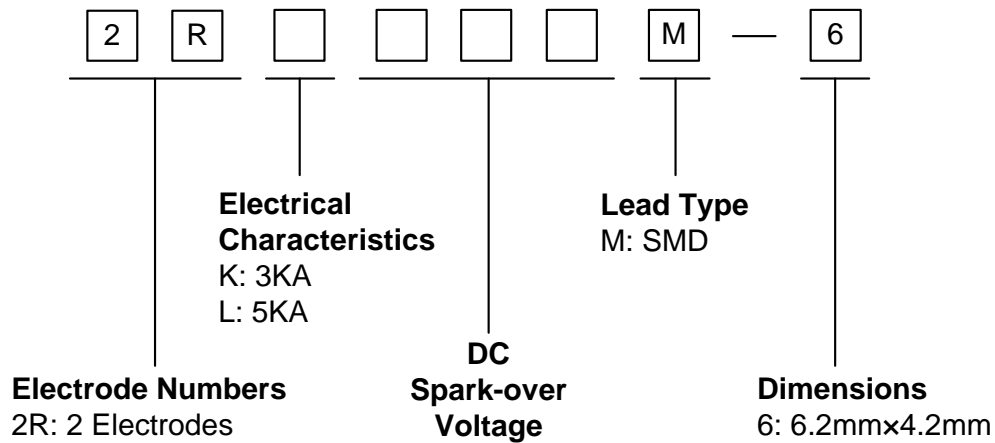
- Provide ultra-fast response to surge voltage from slow-rising surge of 100V/s to rapid-rising surge of 1KV/μs
- Stable breakdown voltage
- High insulation resistance
- Low capacitance (≤1pF)
- High holdover voltage
- Large absorbing transient current capability
- Micro-Gap Design
- Size: 6.2mm\*4.2mm
- Storage and operating temperature: -40°C ~ +85°C
- Meets MSL level 1, per J-STD-020
- Safety certification: UL



### Applications

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

### Part Number Code



### Marking

- B** : BrightKing Logo
- 2RL090-6 : Device Marking Code
- XXXX : Internal Control Code

**Dimensions**

<p>M Type</p> <p>Recommended Pad Size</p>	Dimension (mm)		
	Symbol	Spec.	Tolerance
	D	6.2	±0.2
	T	4.2	±0.2
	B	0.6	±0.1
d	6.0	±0.2	

**Electrical Characteristics**

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)	
2RL075M-6	75±20%	700	5	5	500	25	1	1.0	2RL075-6
2RL090M-6	90±20%	700	5	5	500	50	1	1.0	2RL090-6
2RL145M-6	145±20%	700	5	5	500	100	1	1.0	2RL145-6
2RL150M-6	150±20%	700	5	5	500	100	1	1.0	2RL150-6
2RL230M-6	230±20%	650	5	5	500	100	1	1.0	2RL230-6
2RL250M-6	250±20%	650	5	5	500	100	1	1.0	2RL250-6
2RL300M-6	300±20%	700	5	5	500	100	1	1.0	2RL300-6
2RL350M-6	350±20%	750	5	5	500	100	1	1.0	2RL350-6
2RL400M-6	400±20%	800	5	5	500	100	1	1.0	2RL400-6
2RL470M-6	470±20%	900	5	5	500	250	1	1.0	2RL470-6
2RL600M-6	600±20%	1000	5	5	500	250	1	1.0	2RL600-6
2RL800M-6	800±20%	1200	5	5	500	250	1	1.0	2RL800-6
2RK1000M-6	1000±20%	1600	3	3	300	500	1	1.0	2RK1000-6
2RK1200M-6	1200±20%	1800	3	3	300	500	1	1.0	2RK1200-6
2RK1800M-6	1800±20%	2600	3	3	300	500	1	1.0	2RK1800-6

**Electrical Ratings**

Items	Test Condition/Description	Requirement
DC Spark-over Voltage	The voltage is measured with voltage ramp dv/dt=100V/s.	To meet the specified value
Maximum Impulse Spark-over Voltage	The maximum impulse spark-over voltage is measured with voltage ramp dv/dt=1000V/μs.	

<p>Impulse Discharge Current</p>	<p>Maximum 8/20<math>\mu</math>s surge current that can be applied between two electrodes, 5 positive and 5 negative surges, with 3 minutes interval time.</p>
<p>Alternating Discharge Current</p>	<p>Rated RMS value of AC current at 50Hz, 1 sec. for 10 times with interval time 3 min.</p>
<p>Insulation Resistance</p>	<p>The resistance of gas tube shall be measured between two electrodes.</p>
<p>Capacitance</p>	<p>The capacitance of gas tube shall be measured between two electrodes. Test frequency: 1MHz</p>

**Recommended Soldering Conditions**

