Innovative Service Around the Globe YAGEO

DATA SHEET

GAS DISCHARGE TUBES
TELEPHONE INTERFACE

2R-5-SSHT series

RoHS compliant & free



Product specification– February 10, 2026 V.1

Gas Discharge Tube (GDT) Data Sheet

Features

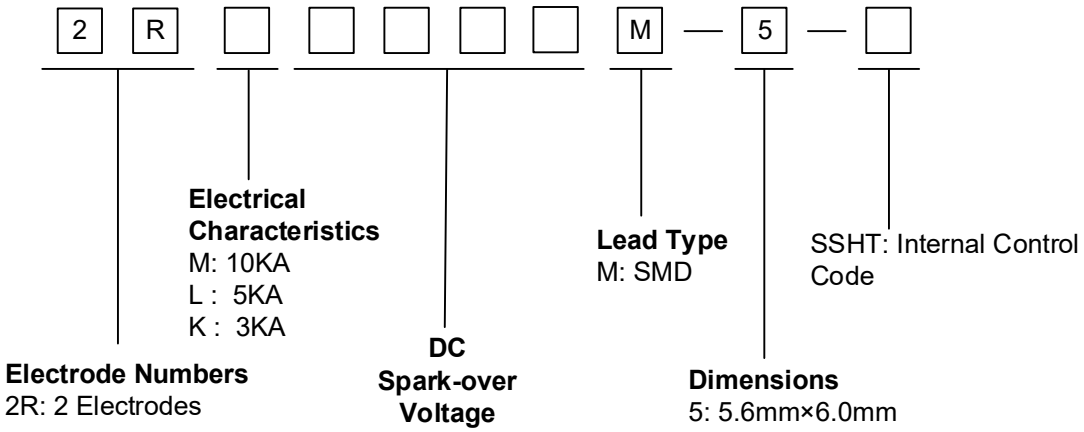


- Provide ultra-fast response to surge voltage from slow-rising surge of 100V/s to rapid-rising surge of 1KV/μs
- Stable breakdown voltage
- High insulation resistance
- Low capacitance (≤1.5pF)
- High holdover voltage
- Large absorbing transient current capability
- Micro-Gap Design
- Size: 5.6mm*6.0mm
- Operating temperature: -40℃ ~ +125℃
- 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

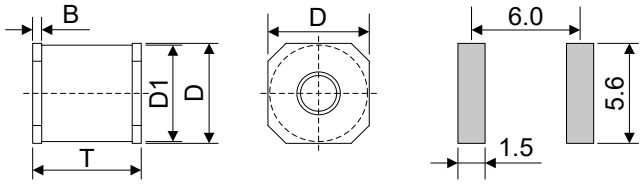


Marking

IB : BrightKing Logo
2RK1000-5 : Device Marking Code
XXXX : Internal Control Code

Dimensions

M Type



Recommended Pad Size

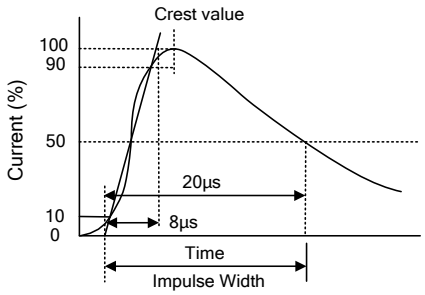
Symbol	Dimension (mm)	
	Spec.	Tolerance
D	5.6	±0.2
D1	5.4	±0.2
T	6.0	±0.2
B	0.5	±0.2

Electrical Characteristics

Part Number	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Nominal Impulse Discharge Current	Impulse Life	Minimum Insulation Resistance		Maximum Capacitance	AC Withstanding Voltage	Device Marking Code
	100V/s	1000V/μs	8/20μs 10times	8/20μs 100A	Test Voltage	(GΩ)	1MHz		
	(V)	(V)	(KA)	(times)	DC(V)		(pF)		
2RM075M-5-SSHT	75±20%	600	10.0	300	25	1.0	1.5	-	2RM075-5
2RM090M-5-SSHT	90±20%	600	10.0	300	50	1.0	1.5	-	2RM090-5
2RM120M-5-SSHT	120±20%	600	10.0	300	50	1.0	1.5	-	2RM120-5
2RM150M-5-SSHT	150±20%	600	10.0	300	100	1.0	1.5	-	2RM150-5
2RM230M-5-SSHT	230±20%	700	10.0	300	100	1.0	1.5	-	2RM230-5
2RM250M-5-SSHT	250±20%	700	10.0	300	100	1.0	1.5	-	2RM250-5
2RL300M-5-SSHT	300±20%	900	5.0	300	100	1.0	1.5	-	2RL300-5
2RL350M-5-SSHT	350±20%	900	5.0	300	100	1.0	1.5	-	2RL350-5
2RL400M-5-SSHT	400±20%	900	5.0	300	100	1.0	1.5	-	2RL400-5
2RL470M-5-SSHT	470±20%	1100	5.0	300	250	1.0	1.5	-	2RL470-5
2RL600M-5-SSHT	600±20%	1400	5.0	300	250	1.0	1.5	-	2RL600-5
2RL800M-5-SSHT	800±20%	1600	5.0	300	250	1.0	1.5	-	2RL800-5
2RK1000M-5-SSHT	1000±20%	1900	3.0	300	500	1.0	1.5	-	2RK1000-5
2RK1200M-5-SSHT	1200±20%	2200	3.0	300	500	1.0	1.5	-	2RK1200-5
2RK1400M-5-SSHT	1400±20%	2600	3.0	300	500	1.0	1.5	-	2RK1400-5
2RK1600M-5-SSHT	1600±20%	2800	3.0	300	500	1.0	1.5	-	2RK1600-5
2RK2000M-5-SSHT	2000±20%	3200	3.0	300	500	1.0	1.5	-	2RK2000-5
2RK2500M-5-SSHT	2500±20%	3600	3.0	300	1000	1.0	1.5	AC1250V,1 min	2RK2500-5

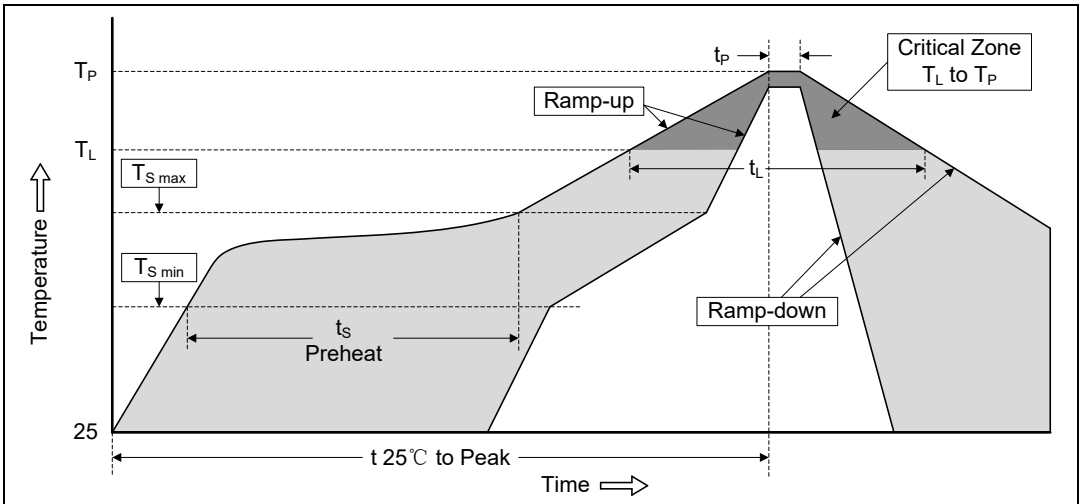
Electrical Ratings

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.	

Impulse Discharge Current	Maximum 8/20μs surge current that can be applied between two electrodes, 5 positive and 5 negative surges, with 3 minutes interval time. 	
Insulation Resistance	The resistance of gas tube shall be measured between two electrodes.	
Capacitance	The capacitance of gas tube shall be measured between two electrodes. Test frequency: 1MHz	

Recommended Soldering Conditions

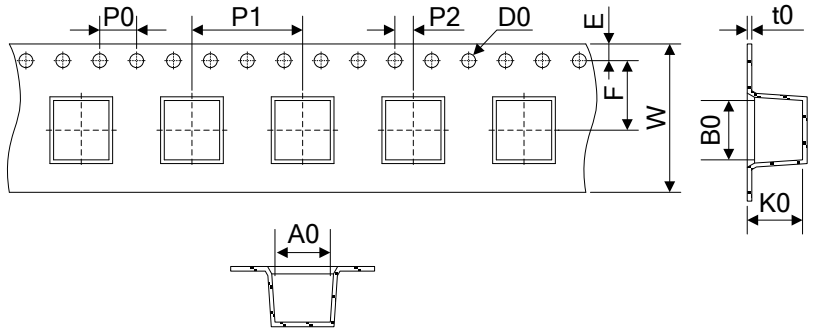
Reflow Soldering



Profile Feature	Pb-Free Assembly
Average ramp-up rate (T_L to T_P)	3℃/second max.
Preheat -Temperature Min ($T_{S\ min}$) -Temperature Max ($T_{S\ max}$) -Time (min to max) (ts)	 150℃ 200℃ 60-180 seconds
$T_{S\ max}$ to T_L -Ramp-up Rate	 3℃/second max.
Time maintained above: -Temperature (T_L) -Time (t_L)	 217℃ 60-150 seconds
Peak Temperature (T_P)	260℃
Time within 5℃ of actual Peak Temperature (t_P)	20-40 seconds
Ramp-down Rate	6℃/second max.
Time 25℃ to Peak Temperature	8 minutes max.

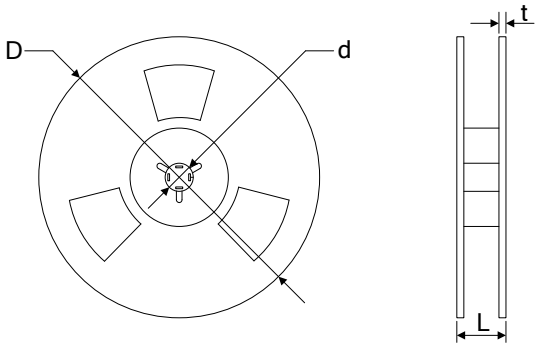
Packaging

Tape



Symbol	Dimension (mm)	
	Spec.	Tolerance
W	16.00	±0.20
P0	4.00	±0.10
P1	12.00	±0.10
P2	2.00	±0.10
D0	1.55	±0.10
E	1.75	±0.10
F	7.50	±0.10
A0	5.90	±0.10
B0	6.30	±0.10
K0	5.90	±0.10
t0	0.50	±0.10

Reel



D	330.00	±2.00
d	13.00	±0.50
L	20.00	±2.00
t	2.00	±0.20

Quantity: 800pcs

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