Innovative Service Around the Globe YAGEO

DATA SHEET

GAS DISCHARGE TUBES
TELEPHONE INTERFACE

2R-6-HT series

RoHS compliant & free



Product specification– February 10, 2026 V.1

Gas Discharge Tube (GDT) Data Sheet

Features

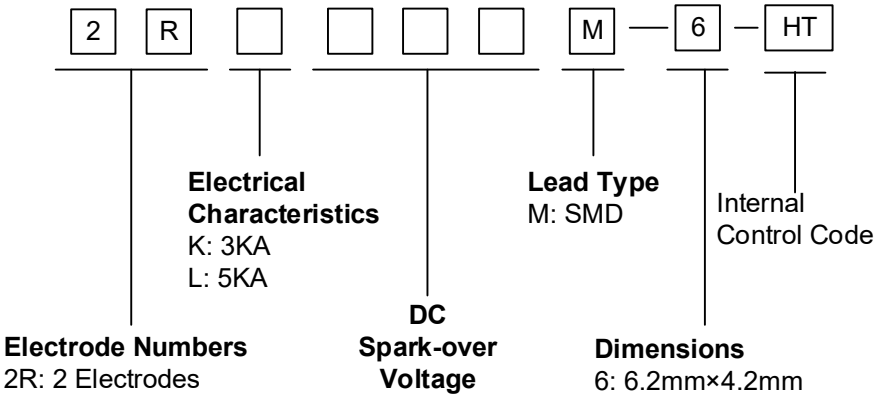


- Provide ultra-fast response to surge voltage from slow-rising surge of 100V/s to rapid-rising surge of 1KV/μs
- Stable breakdown voltage
- High insulation resistance
- Low capacitance (≤1pF)
- High holdover voltage
- Large absorbing transient current capability
- Micro-Gap Design
- Size: 6.2mm*4.2mm
- 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

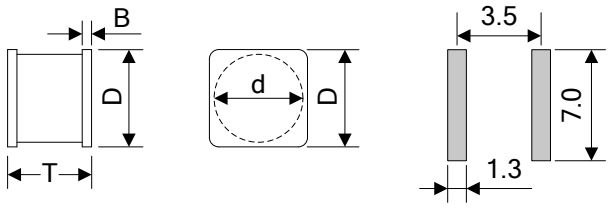


Marking

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

Dimensions

M Type



Recommended Pad Size

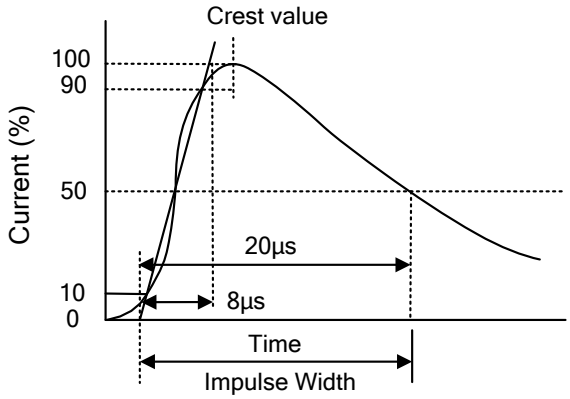
Symbol	Dimension (mm)	
	Spec.	Tolerance
D	6.2	±0.2
T	4.2	±0.2
B	0.6	±0.1
d	6.0	±0.2

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

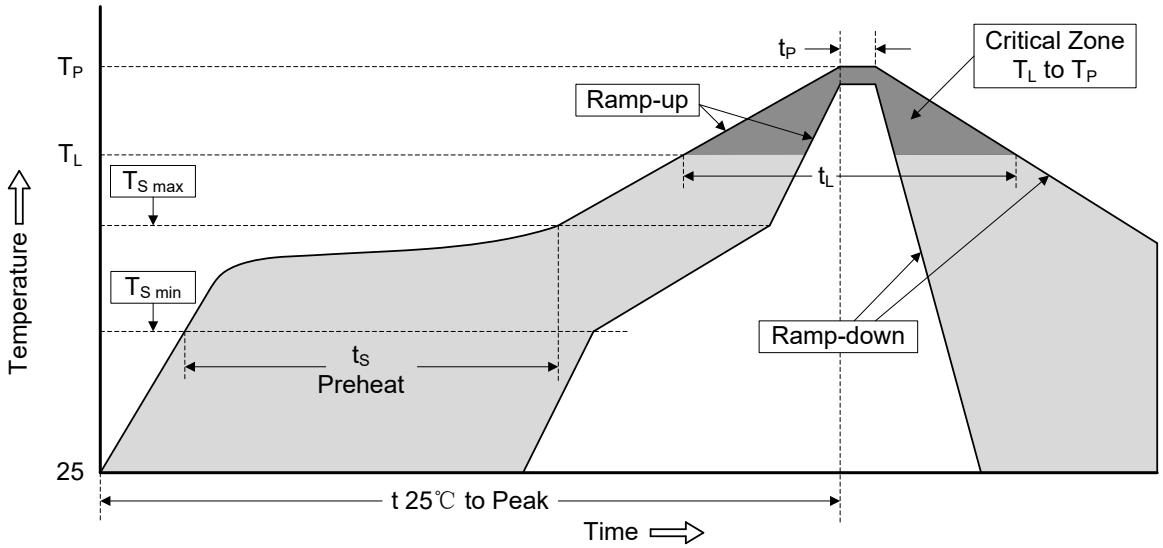
Electrical Ratings

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.
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. 
Alternating Discharge Current	Rated RMS value of AC current at 50Hz, 1 sec. for 10 times with interval time 3 min.
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

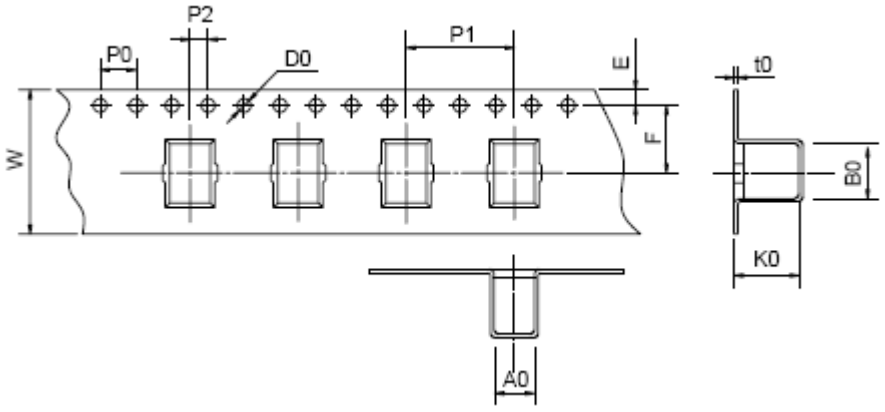


Recommended Conditions

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.

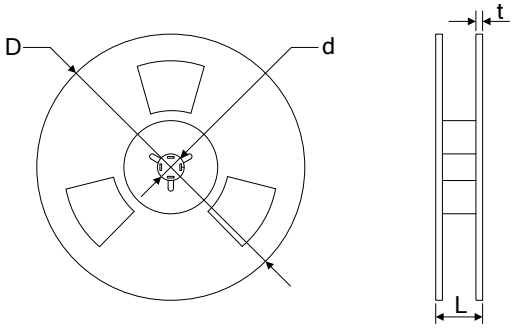
Packaging

Tape



Symbol	Dimension (mm)	
	Spec.	Tolerance
W	16.00	±0.20
P0	4.00	±0.10
P1	12.00	±0.20
P2	2.00	±0.10
D0	1.55	±0.05
E	1.75	±0.10
F	7.50	±0.10
A0	4.44	±0.10
K0	6.37	±0.10
B0	6.48	±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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