Innovative Service Around the Globe YAGEO

DATA SHEET

GAS DISCHARGE TUBES
TELEPHONE INTERFACE

2R-8x6(T6) series

RoHS compliant & free



Product specification– October 12, 2026 V.1

Gas Discharge Tube (GDT) Data Sheet

Features

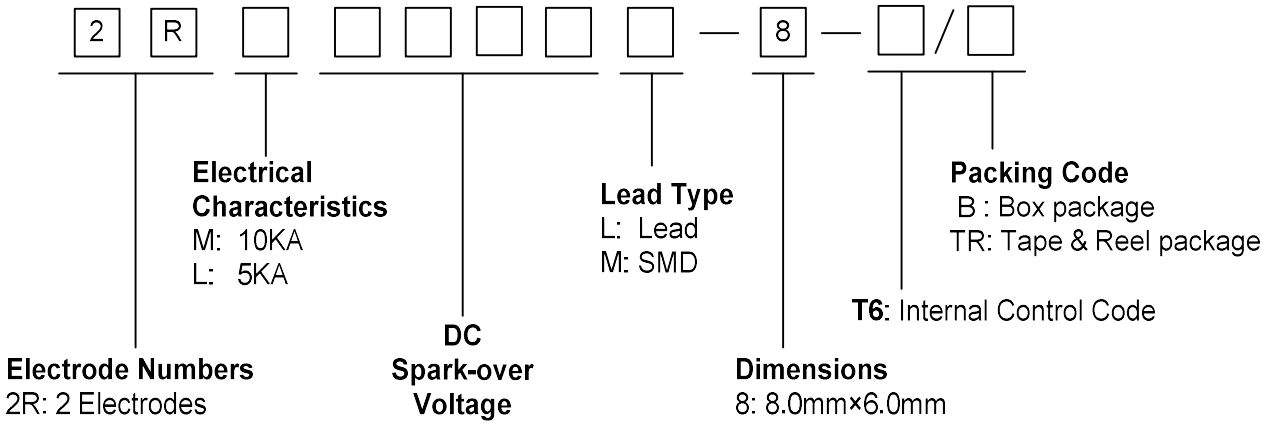


- Provide ultra-fast response to surge voltage from slow-rising surge of100V/s to rapid-rising surge of 1KV/μs
- Stable breakdown voltage
- High insulation resistance
- Low capacitance (≤1.5pF)
- High holdover voltage
- Large absorbing transient current capability
- Micro-Gap Design
- Size: 8.0mm*6.0mm
- Operating temperature: -40℃ ~ +85℃
- 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



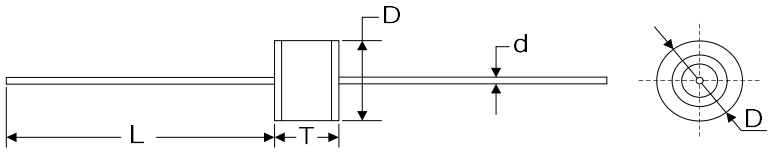
Ordering Code	Lead type	Package
2RMXXXL8-T6//B 2RLXXXL8-T6/B	Lead	Box(Tray)
2RMXXXL8-T6/TR 2RLXXXL8-T6/TR	Lead	Tape & Reel
2RMXXXM8-T6 2RLXXXM8-T6	SMD	Tape & Reel

Marking

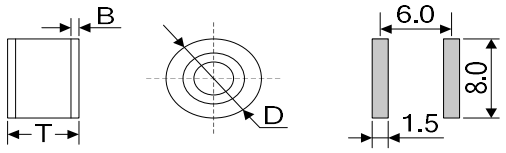
B	: BrightKing Logo
2RM1000-8	: Device Marking Code
XXXX	: Internal Control Code

Dimensions

L Type



M Type



Recommended Pad Size

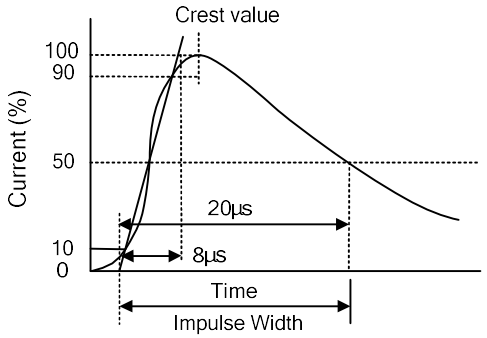
Symbol	Dimension (mm)	
	Spec.	Tolerance
D	8.0	+0.3, -0.5
T	6.0	+0.3, -0.5
d	0.8	±0.1
L	30.0	Max.
D	8.0	+0.3, -0.5
T	6.0	+0.3, -0.5
B	0.5	±0.1

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	AC Withstanding Voltage	Device Marking Code
	100V/s	1000V/μs	8/20μs 10times	50Hz,1sec	8/20μs 100A	Test Voltage	(GΩ)	1MHz		
	(V)	(V)	(KA)	(A)	(times)	DC(V)		(pF)		
2RM1000X-8-T6	1000±20%	1900	10.0	5.0	300	500	1.0	1.5	-	2RM1000-8
2RM1200X-8-T6	1200±20%	2000	10.0	5.0	300	500	1.0	1.5	-	2RM1200-8
2RM1400X-8-T6	1400±20%	2200	10.0	5.0	300	500	1.0	1.5	-	2RM1400-8
2RM1500X-8-T6	1500±20%	2300	10.0	5.0	300	500	1.0	1.5	-	2RM1500-8
2RM1600X-8-T6	1600±20%	2400	10.0	5.0	300	500	1.0	1.5	-	2RM1600-8
2RL2000X-8-T6	2000±20%	3200	5.0	5.0	300	500	1.0	1.5	-	2RL2000-8
2RL2500X-8-T6	2500±20%	3800	5.0	5.0	300	500	1.0	1.5	AC1250V,1min	2RL2500-8
2RL2700X-8-T6	2700±20%	4000	5.0	5.0	300	1000	1.0	1.5	AC1250V,1min	2RL2700-8
2RL3000X-8-T6	3000±20%	4200	5.0	5.0	300	1000	1.0	1.5	AC1500V,1min	2RL3000-8
2RL3600X-8-T6	3600±20%	5500	5.0	5.0	300	1000	1.0	1.5	AC1800V,1min	2RL3600-8

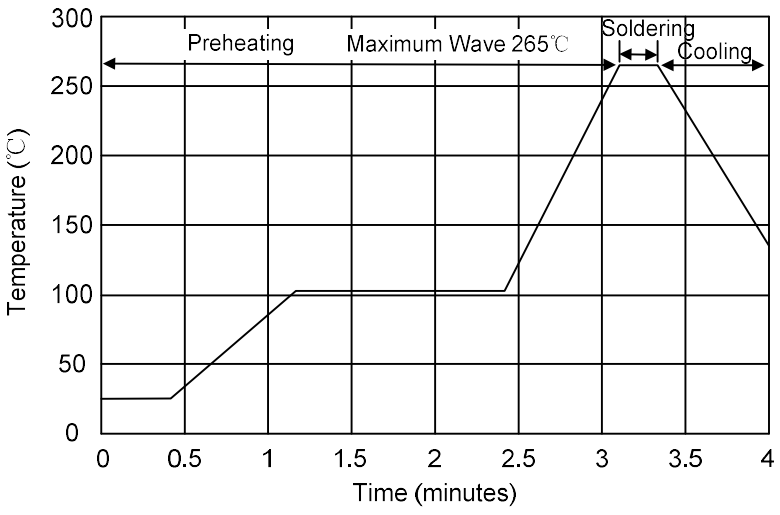
Note: X may be L(Lead type) or M(SMD type)

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	

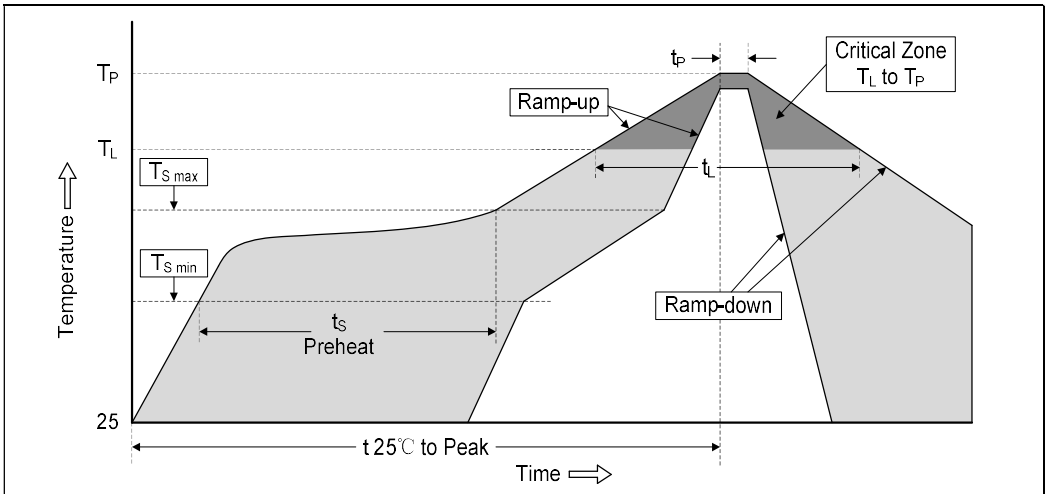
Recommended Soldering Conditions

Wave Soldering



Item	Conditions
Peak Temperature	265℃
Dipping Time	10 seconds
Soldering	1 time

Reflow Soldering

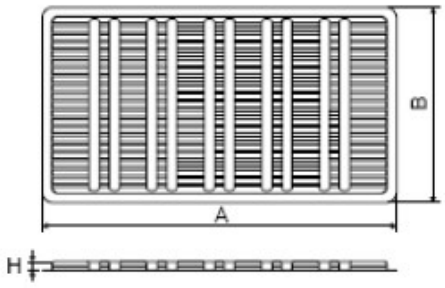


Profile Feature	Pb-Free Assembly
Average ramp-up rate (T_L to T_P)	3℃/second max.
Preheat -Temperature Min ($T_{S\,min}$) -Temperature Max ($T_{S\,max}$) -Time (min to max) (ts)	 150℃ 200℃ 60-180 seconds
$T_{S\,max}$ to T_L -Ramp-up Rate	 3℃/second max.
Time maintained above: -Temperature (T_L) -Time (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

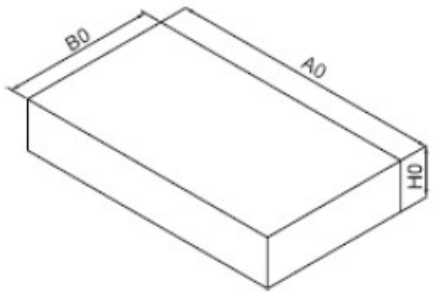
Axial Packing (Box)

Skin packing



Symbol	Dimension (mm)	
	Spec.	Tolerance
A	267.0	±2.0
B	146.0	±2.0
H	8.5	±1.0
Quantity: 100pcs		

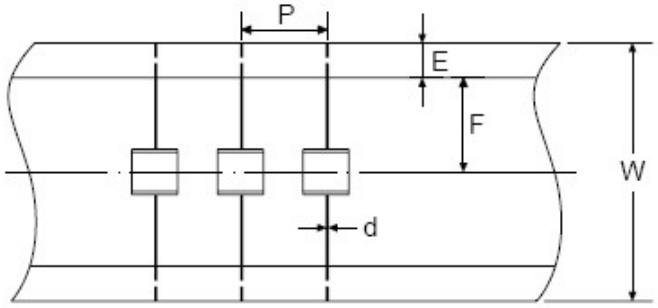
Inner box



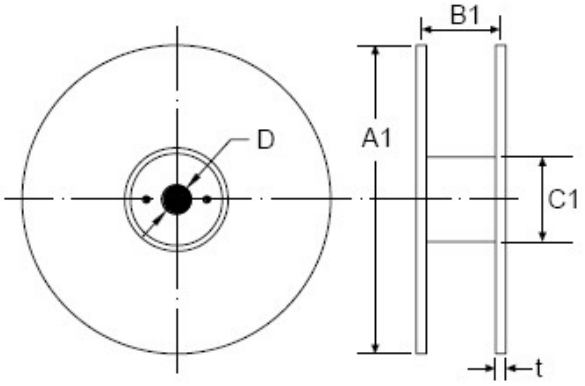
A0	270.0	±2.0
B0	150.0	±2.0
H0	50.0	±2.0
Quantity: 500pcs		

Axial Packing (Tape & Reel)

Tape



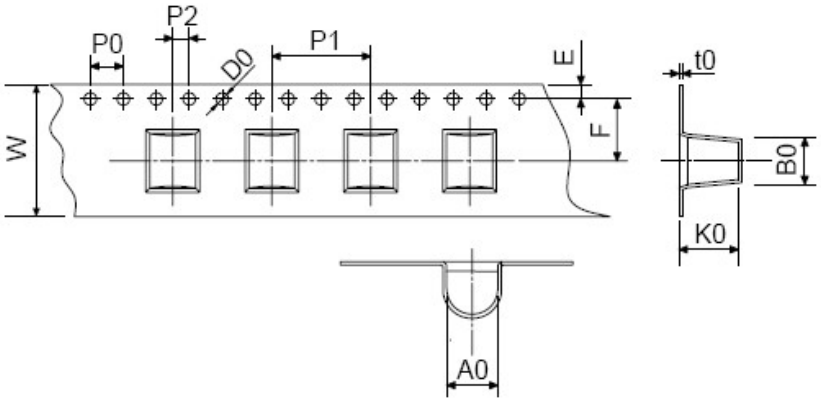
Reel



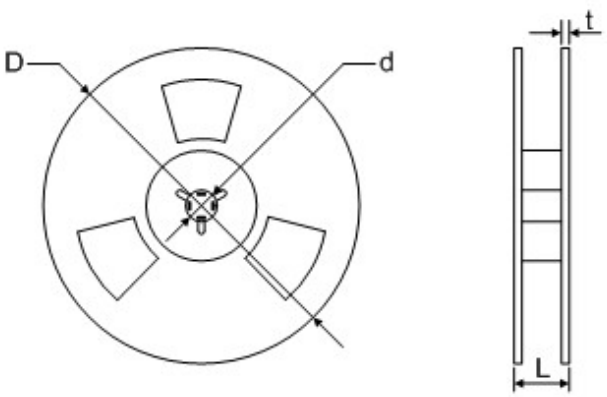
Symbol	Dimension (mm)	
	Spec.	Tolerance
P	10.0	±0.5
W	65.0	±1.0
E	6.0	±0.5
F	26.5	±0.5
d	0.8	±0.1
A1	330.0	±2.0
B1	70.0	±2.0
C1	82.0	±2.0
D	25.0	±0.5
t	2.0	±0.2
Quantity: 800pcs		

SMD Packing (Tape & Reel)

Tape



Reel



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	8.20	±0.10
K0	8.50	±0.10
B0	7.50	±0.10
t0	0.50	±0.10
D	330.00	±2.00
d	13.00	±0.50
L	20.00	±2.00
t	2.00	±0.20
Quantity: 500pcs		

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