Innovative Service Around the Globe YAGEO

DATA SHEET

GAS DISCHARGE TUBES
TELEPHONE INTERFACE

2R-8-U-HT series

RoHS compliant & free



Product specification– February 09, 2026 V.1

Gas Discharge Tube (GDT) Data Sheet

Features

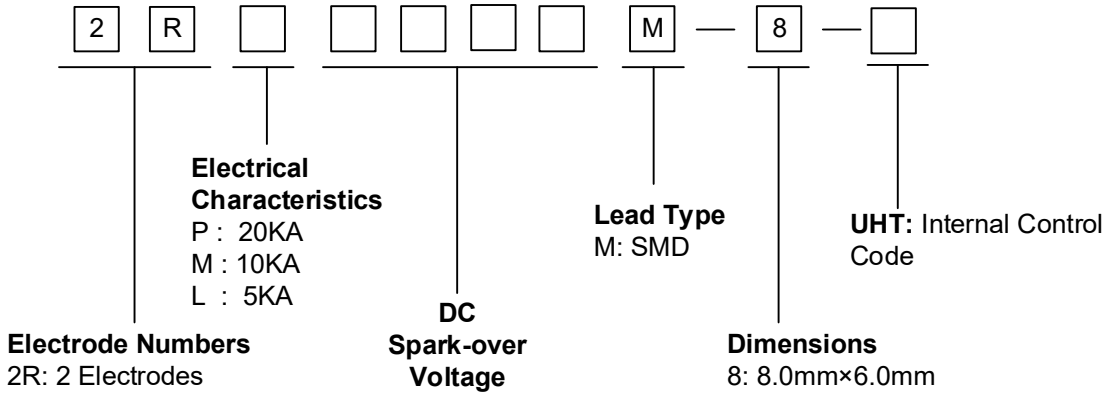


- Provide ultra-fast response to surge voltage from slow-rising surge of100V/s to rapid-rising surge of 1KV/μs
- Stable breakdown voltage
- High insulation resistance
- Low capacitance (≤1.5pF)
- High holdover voltage
- Large absorbing transient current capability
- Micro-Gap Design
- Size: 8.0mm*6.0mm
- Operating temperature: -40℃ ~ +125℃
- Meets MSL level 1, per J-STD-020
- Safety certification: UL

Applications

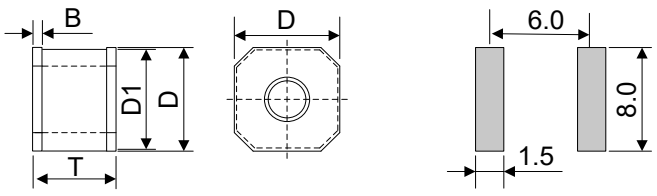
- Repeaters, Modems
- Telephone Interface, Line cards
- Data communication equipment
- Line test equipment

Part Number Code



Dimensions

M Type



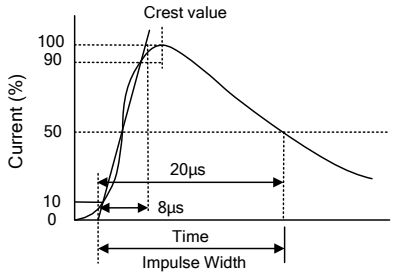
Recommended Pad Size

Symbol	Dimension (mm)	
	Spec.	Tolerance
D	8.0	±0.2
D1	8.0	±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	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)	
2RP075M-8-UHT	75±20%	600	20	20	500	25	1.0	1.5	None
2RP090M-8-UHT	90±20%	600	20	20	500	50	1.0	1.5	None
2RP120M-8-UHT	120±20%	600	20	20	500	50	1.0	1.5	None
2RP150M-8-UHT	150±20%	700	20	20	500	100	1.0	1.5	None
2RP230M-8-UHT	230±20%	700	20	20	500	100	1.0	1.5	None
2RP250M-8-UHT	250±20%	800	20	20	500	100	1.0	1.5	None
2RP300M-8-UHT	300±20%	900	20	20	500	100	1.0	1.5	None
2RP350M-8-UHT	350±20%	900	20	20	500	100	1.0	1.5	None
2RP400M-8-UHT	400±20%	1000	20	20	500	100	1.0	1.5	None
2RP470M-8-UHT	470±20%	1100	20	20	500	250	1.0	1.5	None
2RP600M-8-UHT	600±20%	1300	20	20	500	250	1.0	1.5	None
2RP800M-8-UHT	800±20%	1500	20	20	500	250	1.0	1.5	None
2RM1000M-8-UHT	1000±20%	2200	10	10	300	500	1.0	1.5	None
2RM1200M-8-UHT	1200±20%	2300	10	10	300	500	1.0	1.5	None
2RM1400M-8-UHT	1400±20%	2400	10	10	300	500	1.0	1.5	None
2RM1500M-8-UHT	1500±20%	2400	10	10	300	500	1.0	1.5	None
2RM1600M-8-UHT	1600±20%	2600	10	10	300	500	1.0	1.5	None
2RL2000M-8-UHT	2000±20%	3200	5	5	300	500	1.0	1.5	None
2RL2500M-8-UHT	2500±20%	3600	5	5	300	500	1.0	1.5	None

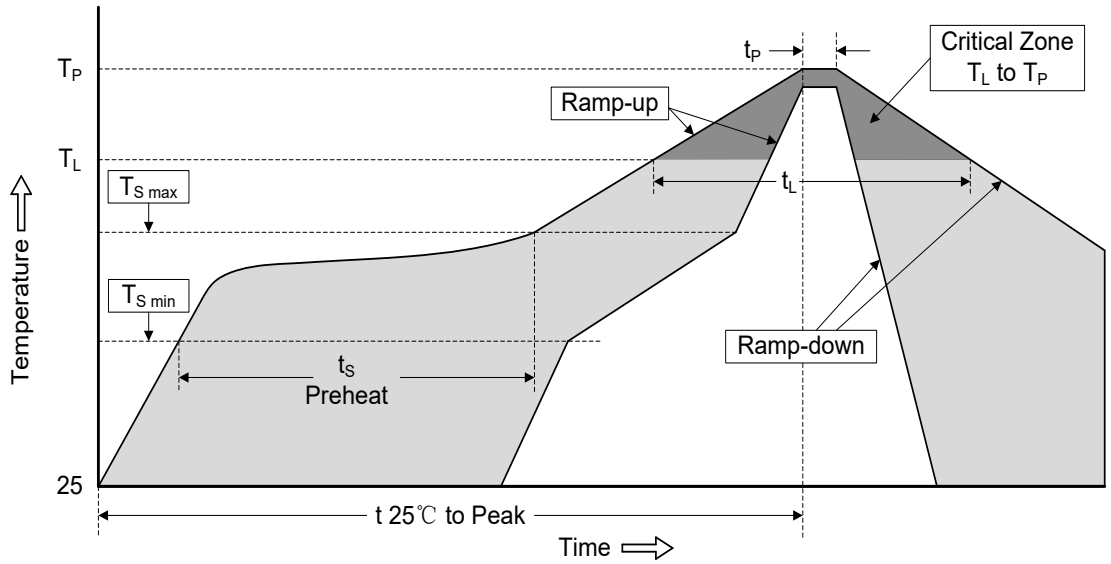
Electrical Ratings

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

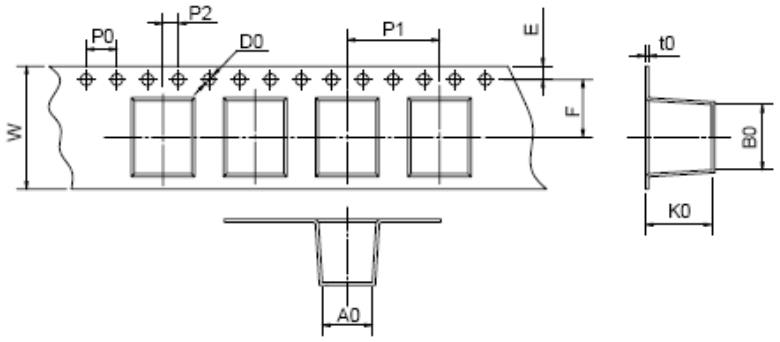


Recommended Conditions

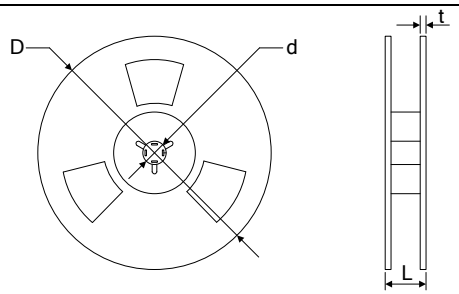
Profile Feature	Pb-Free Assembly
Average ramp-up rate (T_L to T_P)	3℃/second max.
Preheat -Temperature Min ($T_{S\ min}$) -Temperature Max ($T_{S\ max}$) -Time (min to max) (ts)	 150℃ 200℃ 60-180 seconds
$T_{S\ max}$ to T_L -Ramp-up Rate	 3℃/second max.
Time maintained above: -Temperature (T_L) -Time (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	6.35	±0.10
K0	6.55	±0.10
B0	8.65	±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: 600pcs		

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