Innovative Service Around the Globe YAGEO

DATA SHEET

GAS DISCHARGE TUBES
TELEPHONE INTERFACE

2R-5-SST4.2HT series

RoHS compliant & free



Product specification– July 06, 2026 V.1

Gas Discharge Tube (GDT) Data Sheet

Features

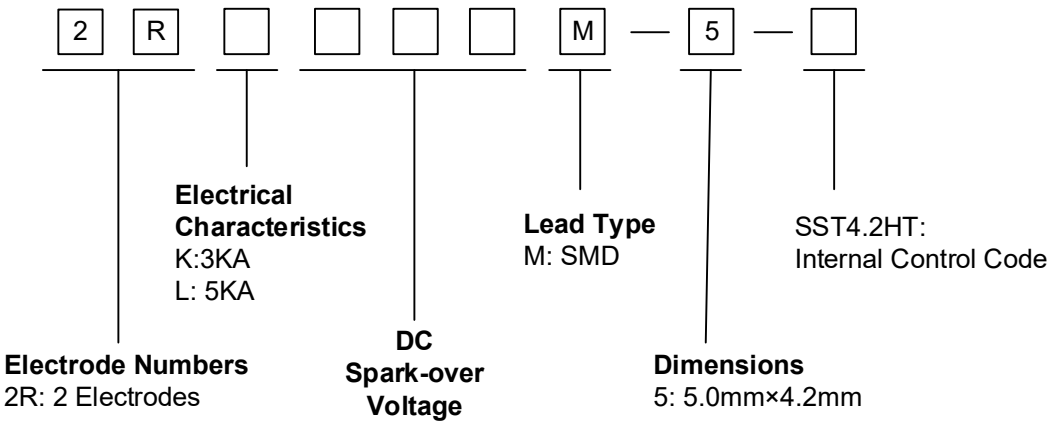


- Provide ultra-fast response to surge voltage from slow-rising surge of 100V/s to rapid-rising surge of 1KV/μs
- Stable breakdown voltage
- High insulation resistance
- Low capacitance (≤1pF)
- High holdover voltage
- Large absorbing transient current capability
- Micro-Gap Design
- Size: 5.0mm*4.2mm
- Square ceramic tube for SMD
- Operating temperature: -40℃ ~ +125℃
- Meets MSL level 1, per J-STD-020
- Safety certification: UL

Applications

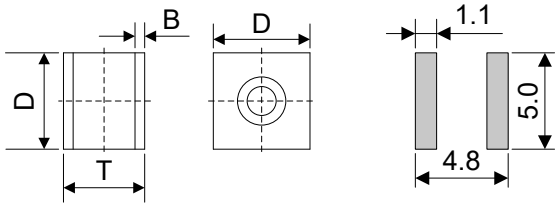
- Repeaters, Modems
- Telephone Interface, Line cards
- Data communication equipment
- Line test equipment

Part Number Code



Dimensions

M Type



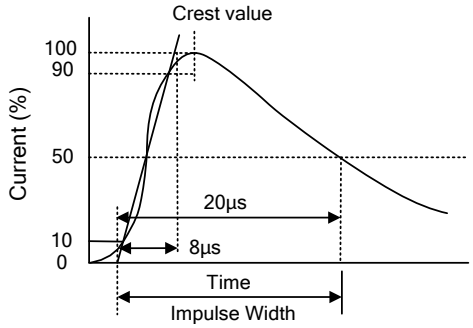
Recommended Pad Size

Symbol	Dimension (mm)	
	Spec.	Tolerance
D	5.0	±0.2
T	4.2	±0.3
B	0.5	±0.1

Electrical Characteristics

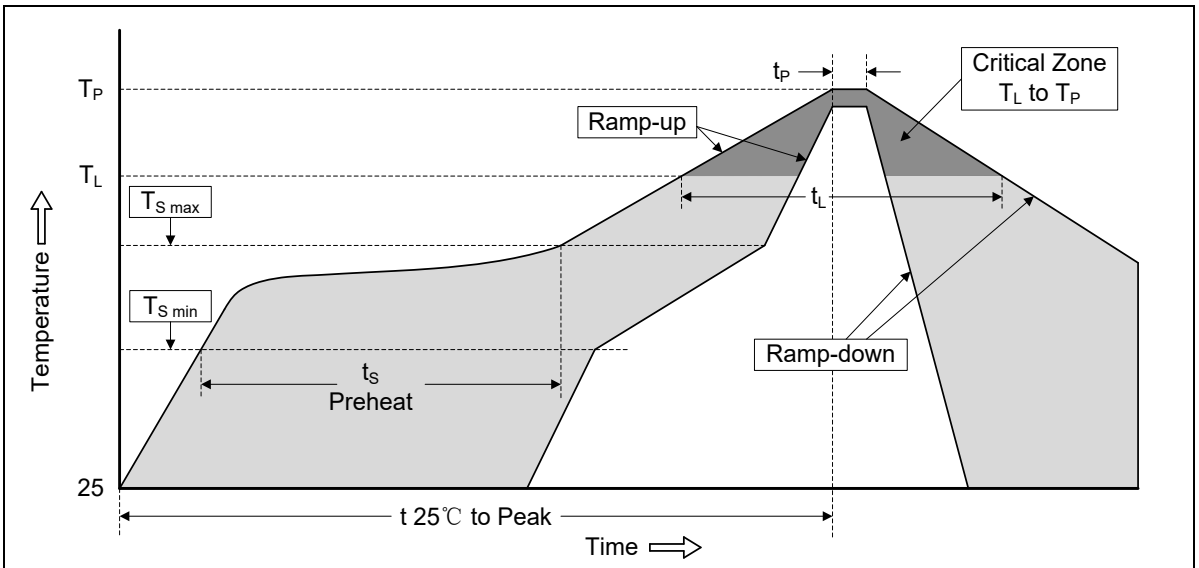
Part Number	DC Spark-over Voltage	Maximum Impulse Spark-over Voltage	Nominal Impulse Discharge Current	Minimum Insulation Resistance		Maximum Capacitance	Device Marking Code
	100V/s	1000V/μs	8/20μs ±5times	Test Voltage	(GΩ)	1MHz	
	(V)	(V)	(KA)	DC(V)		(pF)	
2RL075M-5- SST4.2HT	75±20%	700	5.0	25	1.0	1.0	None
2RL090M-5-SST4.2HT	90±20%	650	5.0	50	1.0	1.0	None
2RL120M-5-SST4.2HT	120±20%	700	5.0	50	1.0	1.0	None
2RL150M-5-SST4.2HT	150±20%	700	5.0	100	1.0	1.0	None
2RL230M-5-SST4.2HT	230±20%	700	5.0	100	1.0	1.0	None
2RL250M-5-SST4.2HT	250±20%	700	5.0	100	1.0	1.0	None
2RL300M-5-SST4.2HT	300±20%	800	5.0	100	1.0	1.0	None
2RL350M-5-SST4.2HT	350±20%	850	5.0	100	1.0	1.0	None
2RL400M-5-SST4.2HT	400±20%	900	5.0	100	1.0	1.0	None
2RL470M-5-SST4.2HT	470±20%	1000	5.0	250	1.0	1.0	None
2RL600M-5-SST4.2HT	600±20%	1200	5.0	250	1.0	1.0	None
2RK800M-5-SST4.2HT	800±20%	1600	3.0	250	1.0	1.0	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. 	
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

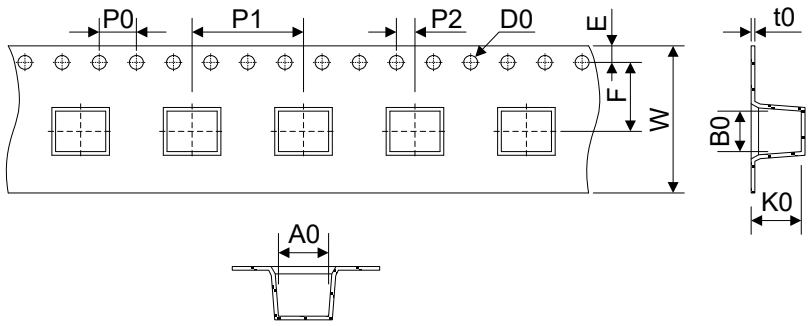
Reflow Soldering



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.

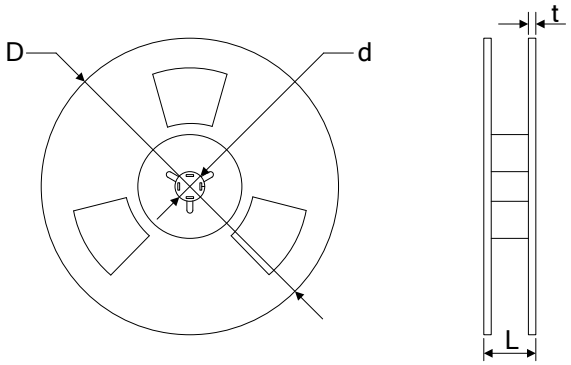
Packaging

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	5.30	±0.10
B0	4.50	±0.10
K0	5.40	±0.10
t0	0.40	±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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